Jands Vista console

User guide

Vista User Guide, Version 1.5a

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European Norms	Australian / New Zealand Standards
EN55103-1	AS/NZS 4251.1
EN55103-2	AS/NZS 4252.1
EN60950	AS/NZS60950

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- connect the equipment into an outlet on a different circuit from that to which the receiver is connected;
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Welcome to the Vista

Welcome to the User Guide for the *Jands Vista* lighting console. This guide is intended to give you the information you need to get your Vista up and running as quickly as possible.

Note that this guide will be regularly updated as enhancements are made to the Vista. A current version of the manual is available at www.jandsvista.com.

What is different about the Vista?

You'll have noticed that the Vista is a bit different to most other console you've used. Instead of a keypad, it uses a pen; instead of relying on you entering hundreds of key combinations, the Vista lets you do everything visually; instead of representing your show as numbers, the Vista represents it as events happening over time.

If you've seen any of the digital editing software packages for sound and video that are available these days, the most different aspect of the Vista, the timeline, will be instantly familiar to you. If not, don't worry, once you start using it you'll pick it up very quickly.

The Vista is different, but that's what makes it so much easier to use. Once you've read this guide you'll have enough of an idea of how this console works to create your first lightshow.

What things are the same as on other consoles?

Apart from the pen and the timeline concept, the Vista contains all the basic elements of live lighting that you're familiar with. You'll find controls for intensity, colour, beam, gobos and so on; you'll find libraries of all the manufacturers' most popular fixtures to choose from; you'll find a console that has the usual faders, buttons and LCD displays.

So don't worry, the Vista has a lot in common with other consoles – we've taken all the best elements of existing consoles and added a whole new dimension to them. You'll soon be right at home with the Vista.

About the generic fixture model

One thing about the Vista that's not immediately obvious is the 'generic fixture model'. What is it? It's a part of the software that works in the background and enables all fixtures, no matter what type or manufacturer to be treated the same way.

Let's say you've programmed a show using one brand of fixture but need to replace some of them with a different kind. Normally this would be a major hassle because you'd have to find a similar fixture then re-program each and every cue.

With the Vista, you can replace a fixture and you don't have to do any re-programming. Why? Because everything you've programmed is stored in generic form rather than as specific DMX channel values. For instance if you've programmed the lights to be Red, the Vista can send that information to any light and achieve the same colour.

Sure, if you replace a fixture that has colour mixing with a fixture that has a fixed colour wheel, you won't expect to get the exact same result, but even in this case, the Vista will adapt and provide as near a match as the replacement fixture is capable of.

Need more information?

If you have questions about the Vista or you'd like more information, go to our website at www.jands.com.au, or call us on +61-2-9582-0909.

Getting started

Setting up the console

Power

Connect the Vista to any mains supply between 100 and 240vAC.

External displays

You can attach two external displays to the Vista using standard VGA connectors. The screen resolution is 1024x768.

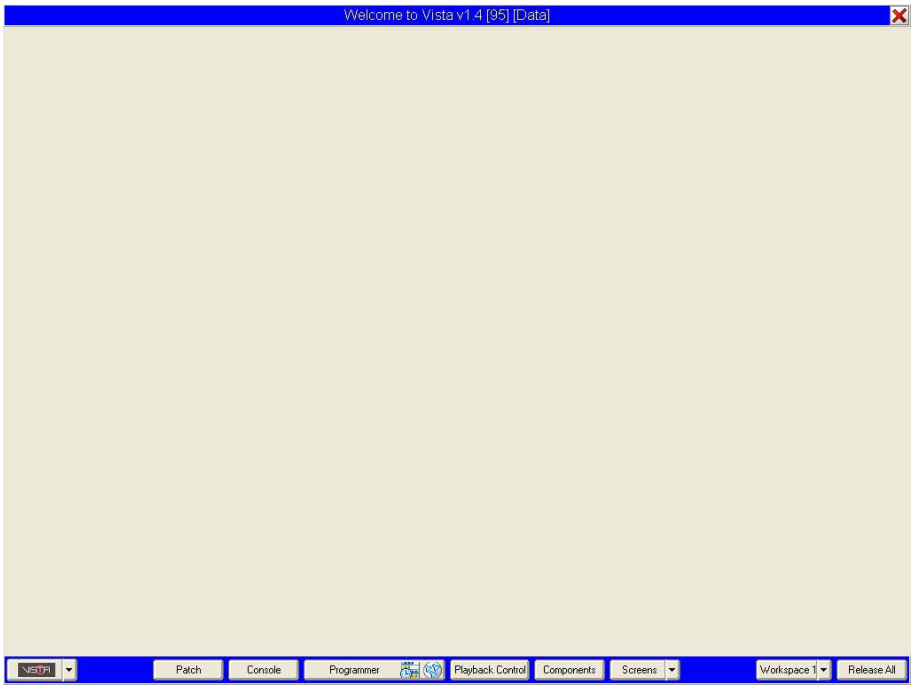
Desk Lights

You can attach two Littlelite or equivalent desklights to the Vista.

Switching on

When you switch the power on, Vista starts up and displays the opening splash screen:

Once it finishes loading the program, Vista displays the main screen:



This screen is a blank canvas, waiting for you to create a new show. To get started you use the buttons on the toolbar at the bottom of the screen:

This button…	**does this…**
VISTA	Displays the Vista menu where you can load and save shows, set user preferences, import and export shows and close down or restart the console.
Patch	Displays the Patch window so you can configure your DMX settings
Console	Displays the Console hardware simulation window
Programmer 	Displays the Programmer window in either Live or Clip edit mode. The two icons select the programmer mode as follows: displays the Programmer Timeline view, which is only available if you're editing a clip. If you're in Live mode, click the Store button or choose Save from the File menu to enable this mode. displays the Fixtures window so you can set up your lights and make selections for Live control or Programming
Playback Control	When you have one or more clips running, this button displays the Playback control window so you can see them all at a glance. This window can also be used to control playback.

This button…	does this…
Components	Once you've saved some Groups, Presets clips, etc this button displays the Components window where you can select, modify, duplicate and organize these components.
Screens	Allows you to select one of the following overlay screens - normally for display on the external monitors:
- DMX	displays the Output window that shows DMX output values channel by channel.
- Output	displays the Output window that shows you what each fixture is doing.
Workspace	Displays the current workspace. You can create and delete workspaces using the *Workspaces…* option. Each workspace contains its own set of pages and assignments.
Release all	Clicking this button at any time releases all the fixtures from their current settings as determined by the clips that are running and returns them to their default state.

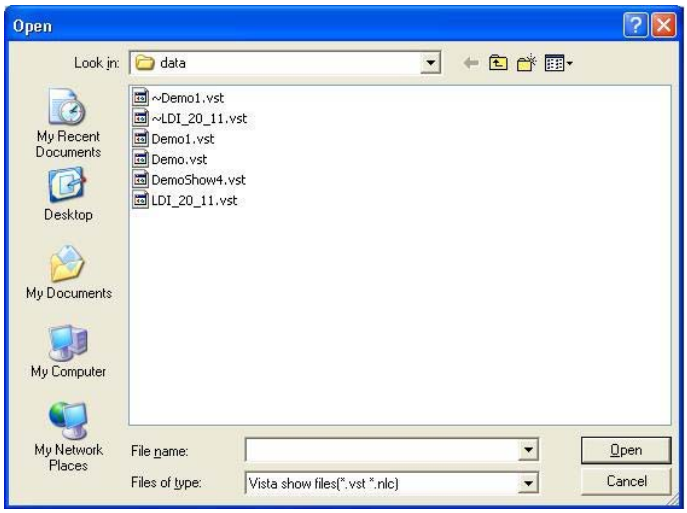
Creating and loading shows

Creating a show

To create a new show at any time, choose the New option from the Vista menu.

Loading existing shows

To load a show you've already created, choose the Load option from the Vista menu. Vista displays the Open window:



To load a show you've previously saved (or loaded into the console using the import function), find the directory containing it, then click on the filename to select it and hit the Open button to load it.

Importing shows

You can load shows you've created on a PC or another console onto the Vista. The shows must be on a CD or any kind of storage device that connects to the Universal Serial Bus (USB) port (such as a memory stick).

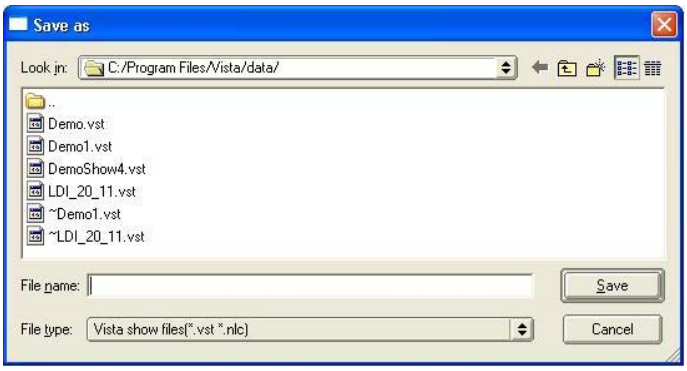
To load a show, attach the USB device or put the CD in the CD drive and choose the Import option from the Show menu. Choose either the CD or USB option from the pop-up menu to display an Open screen, then choose the show file you want to load.

Once you've loaded the show you should use the Save option from the Show menu to save it onto the Vista hard drive immediately.

Saving shows

To save a show at any time, choose the Save option from the Vista menu,. As with any computer, it's a good idea to save regularly in case of power failure.

The first time you save a new show, Vista displays the Save As window:



Type a name for the file and choose the directory in which you want to save it, then click the Save button. Once you've named the file, each time you choose the Save option from then on, Vista overwrites that file with the new details without displaying this window.

Saving copies of shows

To save a separate version of a show with a different name, choose the Save As… option from the Vista menu. You can then give the file another name and save it in another directory if you like.

Exporting shows (backing up)

It's extremely important to make backup copies of your shows. Like any other computer, the Vista stores your shows on a hard drive, and although it's extremely unlikely, if this drive were to fail (e.g. if the console was dropped) you could lose all the show files stored on it.

For this reason we recommend that you make regular backups of your work, either onto CD or onto a storage device that you can connect through the USB port. The Vista includes a CD burner so you can burn backup copies of your show files onto CD at any time.

To copy shows onto CD or an external storage device:

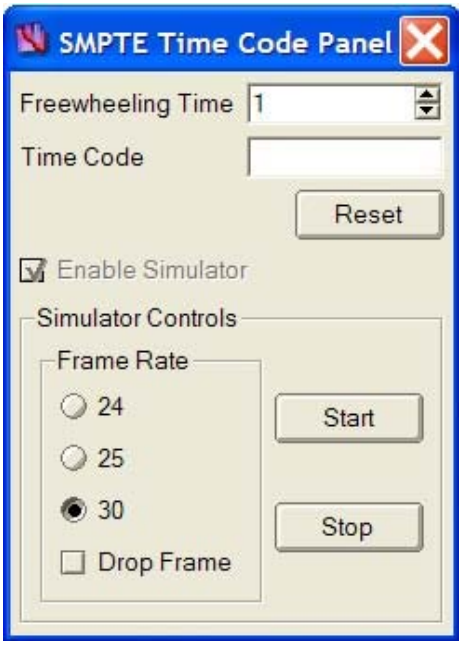
1. Put a blank CD into the CD drive or connect the device to the USB port.
2. Choose the Export option from the Show menu.
3. Choose either the CD or USB option from the pop-up menu to display the Save As… window.
4. Name the file, choose a directory on the CD or storage device and hit the Save button.

Using SMPTE/timecode

If you are going to be running the Vista in conjunction with a device that generates SMPTE timecode, you can simulate the timecode so you can get your show running in time without needing the actual timecode from the other device.

To set up the timecode:

1. Choose the SMPTE/timecode panel option from the Show menu. Vista displays the timecode panel window:



2. Set the Frame rate, check the Drop Frame option if applicable.

3. Hit the Start button to start the timecode running and the Stop button to stop it. The Time Code field shows the elapsed time, and hitting the Reset buttons clears this field.

4. To close the window, click the 'X' symbol in the top right corner.

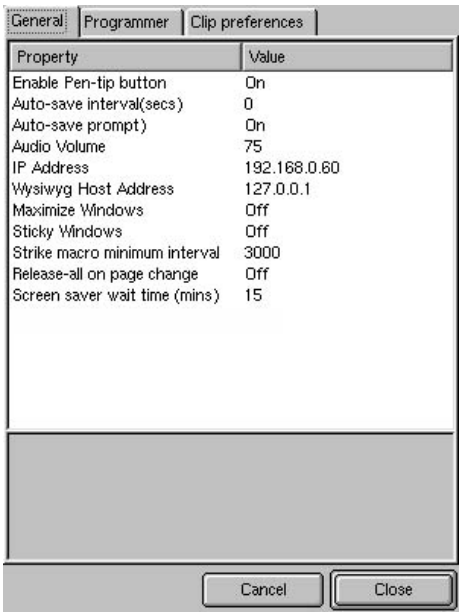
Timecode Dropouts

The Freewheeling time field is used to cope with errors in the SMPTE code coming from an external device such as a Tape player. When Vista encounters a SMPTE error it will simulate timecode for a for a period before assuming the timecode has ended. This field sets the number of seconds Vista will allow to pass while it simulates SMPTE until it relinquishes control.

Setting user preferences

There are a number of system settings that determine how the Vista operates that you can change if you like. To set these preferences, choose the user preferences option from the Show menu. Vista displays the User Preferences screen with the 'General ' tab selected:

General preferences

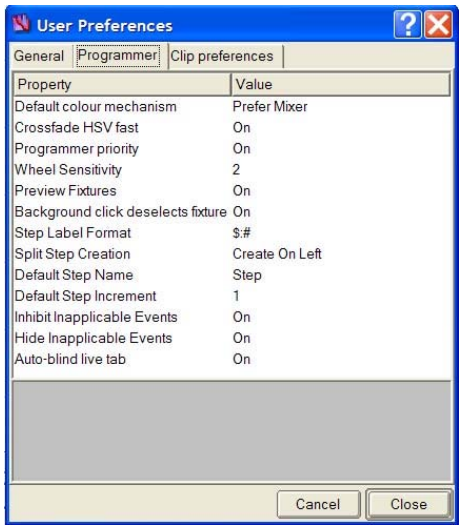


This option…	**does this…**
Enable Pen-tip button (n/a in PC version)	Switches on or off the button on the pen that you use to display the 'right-click' pop-up menu.
Auto-save interval	Sets the number of seconds that will pass between each automatic save of your current show. For instance, if you set this to 60, Vista will do an auto-save every sixty seconds. If you set this to zero, Vista does not do automatic saves.
Auto-save prompt	Sets whether or not Vista displays a prompt asking you if you want to do an automatic save. If this is off, Vista will automatically save in the background at the interval specified in the Auto-save interval field.
Audio Volume (n/a in PC version)	Sets the Audio output level
IP Address (n/a in PC version)	Sets the IP address of the Vista console, e.g. 192.168.0.65
WYSIWYG host address	Sets the address where Vista will try to find a WYSIWYG host. Should be on the same subnet as the console, e.g. 192.168.0.10
Maximise windows	Sets the behaviour of the overlay windows (Output, DMX etc). With maximise set to 'on' the windows open full-screen.

Sticky windows	Sets the behaviour of the buttons located above the tablet when they are used to open the Components, DMX and Output windows. If Off the button must be held down to keep the window open. . If On the button toggles the window open and closed.
Strike Macro Minimum interval	Sets the minimum interval, in milleseconds, between fixtures being struck. When multiple fixtures are selected this setting creates a delay between each fixture striking.
Release-all on page change	All running clips are released when the current page / workspace is changed
Screensaver wait time	Time in minutes until the screensaver starts. Set to 0 to disable screensaver.

Programmer preferences

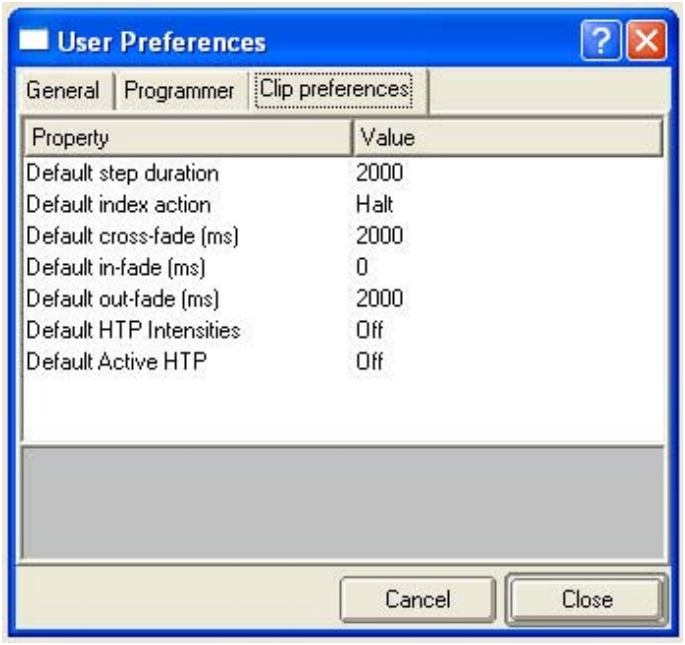
To set the editor preferences click the Programmer tab on the User Preferences screen:



This option…	**does this…**
Default colour mechanism	Sets the default colour mechanism Vista uses when managing lights with colour wheels and colour mixers: • Automatic – uses the colour wheel for Lee colours and mixing for HSV • Prefer Mixer – uses colour mixing unless a colour wheel frame or colour is selected • Prefer fixed - uses the fixture's colour wheel whenever possible.

Crossfade HSV fast	Determines whether or not a crossfade goes through the intervening hues (off) or jumps directly to the specified colour (on).
Programmer priority	Determines whether clips loaded in the programmer have high or normal priority. When set to 'high', any changes you make in the programmer while a clip is playing will override the normal playback.
Wheel Sensitivity	Specifies the number of turns of encoder wheels needed to cover the full range of the assigned parameter (a larger number results in finer control) Normally set to 2
Preview Fixtures	Determines whether the Programmer Fixture window icons display Intensity, Colour, Position and other settings.
Background click deselects fixtures	When this is set to 'on', tapping on a blank space in the Programmer Fixture window de-selects all fixtures.
Step Label Format	Specifies the format of step labels in the programmer. The "$" symbol is replaced by the step name, and the "#" symbol is replaced by the step number, e.g., given a step named "Sunrise", and numbered "1.1", the format "[#] $ " will result in a the label, ": [1.1] Sunrise"
Split Step Creation	Specifies whether the new step is created to the left or right when a step is split
Default Step Name	Specifies the default name for steps created in the programmer.
Default Step Increment	Specifies the default increment between step numbers. Normally set to 1
Inhibit Inapplicable Events	If enabled, events will not be created which cannot be performed by selected fixtures. Inapplicable controls will be disabled.
Hide Inapplicable Events	If enabled, events for parameters which are not applicable to a fixture will be hidden. Note that this does not affect event creation; see Inhibit Inapplicable Events
Auto blind Live Tab	Automatically sets the Programmer Live tab to Blind whenever it is not selected. Useful when reviewing clips that have been exported from the Live Programmer.

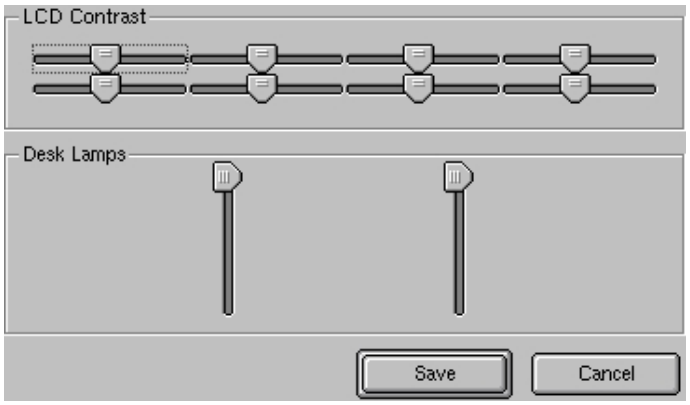
Clip preferences



This option…	**does this…**
Default Step Duration	Determines the default time (in milli-seconds) for new steps. Normally set to 2000ms.
Default Index (Step) Action	Determines the default end-of-fade action for new steps. Options are Halt or Follow. Normally set to Halt.
Default Crossfade (Time)	Determines the default time for Jumps and Overrides. Normally set to 2000ms.
Default in-fade	Determines the over-riding in-fade time for a clip. Useful for easing in a Clip – for example if you wanted to fade in a fast intensity chase. Normally set to 0.
Default out-fade (ms) Default release time	Sets the default time taken for fixtures to be let go when a clip is released. This setting can be overridden by settings in each clip.
Default HTP intensities	Sets the default playback method for Intensity. When set to 'on', the clip that has the highest intensity setting determines fixture intensity. When set to 'off' the clip that has been most recently activated determines fixture intensity.
Default Active HTP	Determines whether you have to press the Go button on a fader to switch the fader on. When set to 'on' the clip's intensity will activate as soon as you move the fader.

Setting Desklight & LCD Contrast settings

There are settings for the Desklight(s) intensity and the Intensity and Contrast on the small blue LCDs. To set these preferences, choose the Desklights and Contrast option from the Vista menu. Vista displays the Desklights and Contrast window:



Drag the sliders to set the required Intensity and Contrast.

Calibrating the Pen

Occasionally it may be necessary to re-calibrate the pen. To begin calibration, choose the Calibrate Pen option from the Vista menu and follow the on screen prompts.

Using the Screensaver

Vista includes a screensaver that also turns off the backlighting on the small blue LCDs. To manually start the screensaver, choose the Start Screensaver option from the Vista menu. The screensaver delay time is set in the User Preferences, General tab.

Using another language

Vista includes a number of alternate languages. To change language, choose the Change language option from the Vista menu.

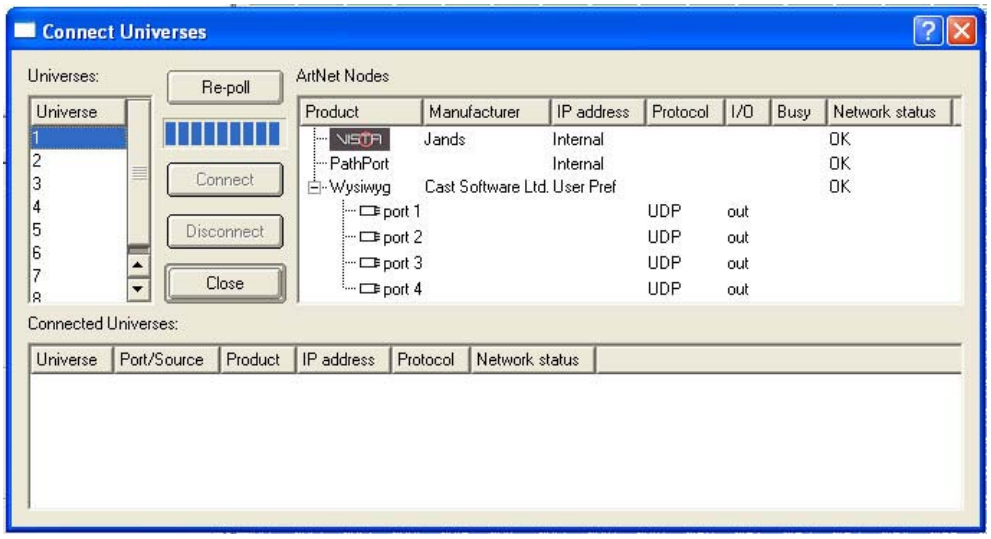
External window utility

Occasionally shows may appear to loose windows that were on external monitors. To reset these windows, choose the Recover External Windows option from the Vista menu. The windows will be relocated to the main tablet LCD and they can be then closed or moved as required..

Patching your rig

Once you've got everything connected to the console you can patch all the fixtures the way you want them using Patch screen.

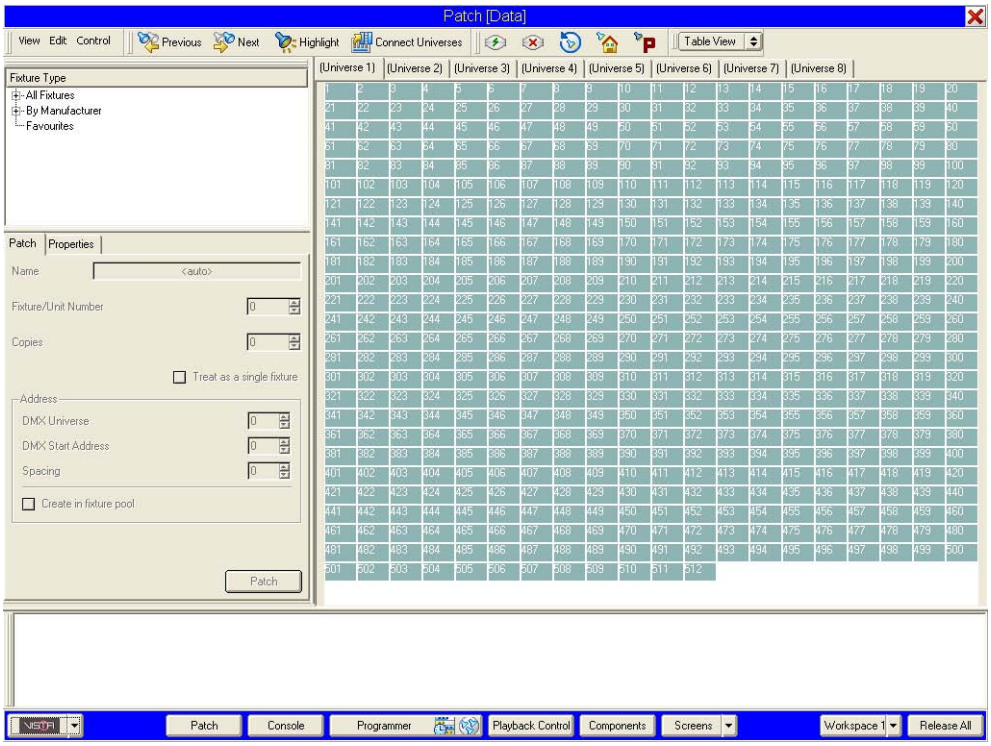
When you click the Patch button on the toolbar for the first time, Vista displays the Connect Universes screen:



You use this screen to connect external Ethernet-DMX interface boxes see *Configuring external Ethernet-DMX interfaces - Page 32* for details). If you aren't using any external DMX boxes, you don't need to adjust any of these settings, just click Close to display the Patch screen.

Tip: You can also display the Connect Universes screen at any time while on the Patch screen by pressing the Connect Universes button on the toolbar at the top of the screen.

When you close the Universe Setup screen, Vista displays the Patch screen:



This is where you set up all the fixtures in your rig. You tell the Vista which DMX channels each fixture is assigned to, and in which universe, and can set a range of parameters to control how each fixture operates.

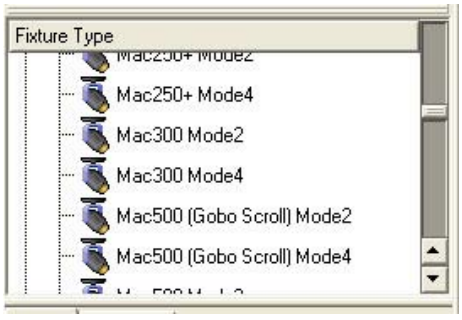
Adding fixtures to the patch

The Fixture Type box in the top-left corner of the screen gives you a few ways to add fixtures to the patch. You can:

- choose a fixture from the 'All fixtures' list, which lists them in alphabetical order
- choose a fixture from the 'By manufacturer' list, which lists them by manufacturer and then in alphabetical order
- once you've added fixtures to the 'Favourites' list, you can pick them from there.

Choosing a fixture from the complete list

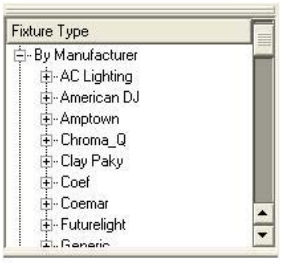
To add a fixture from the complete list, click the '+' symbol beside 'All fixtures' in the Fixture Type box. Vista displays the complete list of fixtures available:



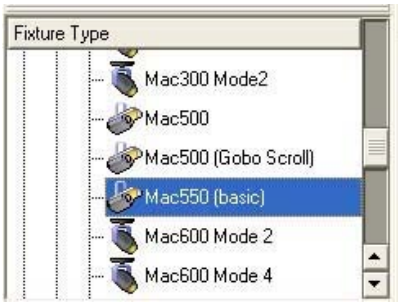
Scroll down the list until you find the fixture you want.

Choosing a fixture by manufacturer

If you click 'By manufacturer' instead, Vista displays the list of manufacturers:



Click the '+' symbol beside the name of the manufacturer you want to display the list of fixtures they offer:



Scroll down the list until you find the fixture you want.

Adding the fixture to the patch panel

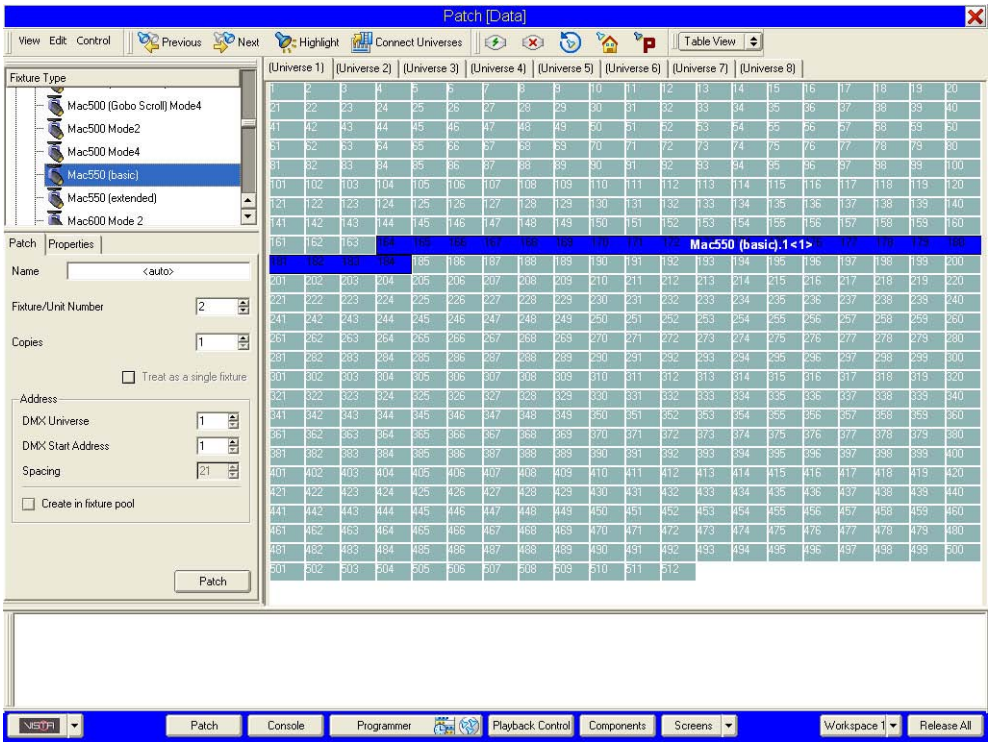
Once you've selected the fixture you want, there are three ways to add it to the patch panel:

- you can drag and drop one fixture at a time onto a specific DMX location on the panel, or
- you can use the Patch tab to place multiple copes of the fixture onto the patch panel ,or
- you can use the on-screen keypad to place multiple copes of the fixture onto the patch panel.

Dragging and dropping individual fixtures

To patch fixtures one at a time, just click on the name of the fixture in the Fixture type box, and drag the fixture over to the spot on the patch panel where you want it.

When you 'drop' the fixture, Vista fills the required number of DMX channels with that fixture's details. This example shows a Martin Mac550 fixture that uses 21 DMX channels, dropped onto channel 164:



Once you've dropped a fixture onto the patch panel you can move it around to any channel by clicking on it and dragging it to a new location.

Vista represents the fixture as a dark blue bar with a black border and two numbers after the name. The bar covers as many DMX channels as the fixture needs, and some fixtures will take up more channels than others.

The dark blue colour shows that this fixture is currently selected. If you click anywhere else in the patch panel, Vista de-selects the fixture and changes the colour to light blue to show that it's no longer selected.

In our example above the fixture is called 'Mac550 (basic).1 <1>'. This title consists of three components:

- a **name** (*Mac550 (basic)*), which you can change if you want to using the *Edit:Rename* option (also available in the pen pop-up menu)
- a **type ID number** (*.1*), that Vista assigns automatically. This number identifies this fixture *of this particular type*.
- a **unique ID number** (*<1>*), that Vista also assigns automatically. This number identifies the fixture uniquely within the whole system, across all the universes (i.e. no two fixtures will ever have the same unique ID number).

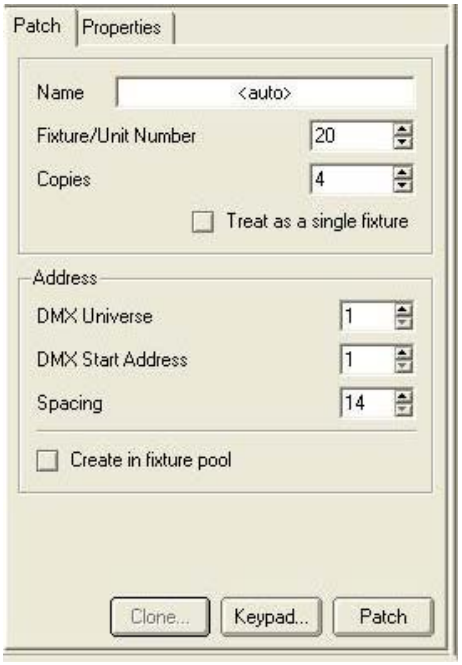
Patching multiple fixtures with the Patch box

Adding fixtures one at a time could be very time consuming, so if you're working with a big rig, the faster way to patch your fixtures is with the Patch box.

You use this feature to add multiple instances of a fixture at once. To do this:

1. Select the fixture you want from the 'All fixtures' or 'By manufacturer' lists in the Fixture Type box.

2. If not already selected, click the Patch tab to display the Patch box:



5. If you want to give the fixture a name, type it in the Name field. If you leave this blank, Vista gives the fixture the name used in the Fixture Type box.

6. If you want to assign a specific set of unique ID numbers to this group of fixtures, click in the Number from field and set the unique ID number (e.g. <*20*>) you want for the first fixture in the group. If you don't set this, Vista assigns the next valid number.

7. In the Copies field, enter the number of instances of this type of fixture you want to add.

8. Click in the Treat as a single fixture checkbox if you want all copies to be patched as one fixture. Use this option, for example, when patching multiple dimmers as a single fixture.

9. In the DMX Universe field, Vista automatically displays the number of the currently selected universe. If you want to add these fixtures to another universe, enter the universe number.

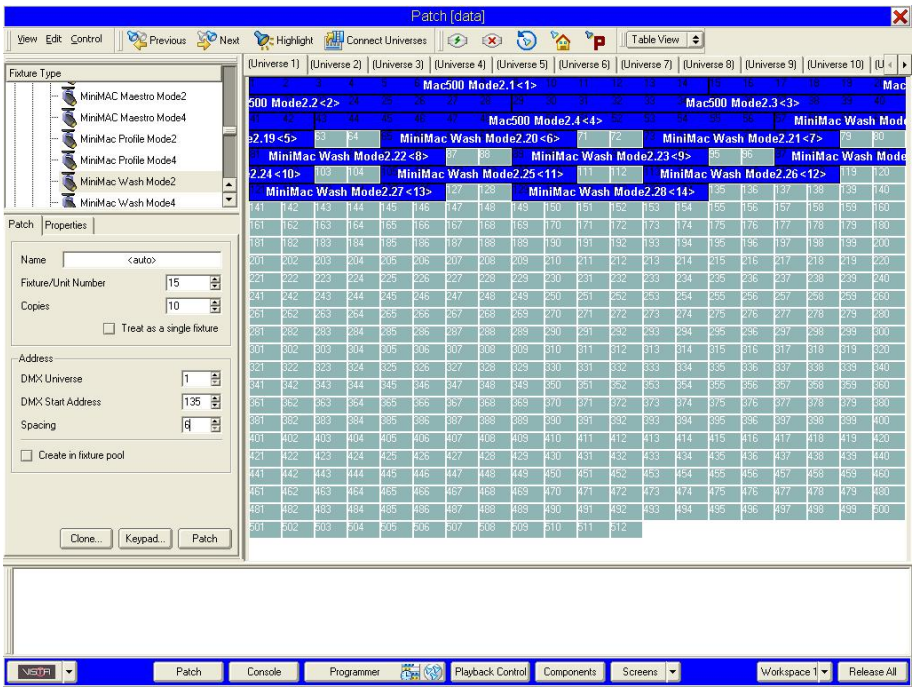
10. In the DMX Start address field, set the number of the DMX channel where you want this group of fixtures to start. If you've already added any fixtures to this universe, Vista displays the next channel number in sequence.

11. In the Spacing field, Vista displays the number of channels each instance of the fixture you've selected will take up. If you want to leave empty channels between each fixture you can increase this number. For example, if a fixture normally uses twelve channels and you increase this number to 14, Vista leaves a gap of two channels between each fixture in the group.

12. Click in the Create in Fixture Pool checkbox if you don't want the fixtures to be automatically patched. When checked the fixtures are created in the pool area and can be manually dragged to the required address. This option is useful when multiple dimmers, that are not on sequential DMX addresses are being patched as a single fixture.

13. When you've set all the fields the way you want them, click the Patch button. Vista adds the group of fixtures to the patch panel.

In this example we've added four Mac500s, followed by ten MiniMac Washes, with a spacing of two channels between each MiniMac:



Tip: If you've already added a bunch of fixtures between say, channel 10 and channel 50, and you add another batch starting at channel 1, Vista fits as many of them as it can into channels 1 to 9, then 'flows' the rest over to channel 51.

Patching multiple fixtures with the virtual keypad

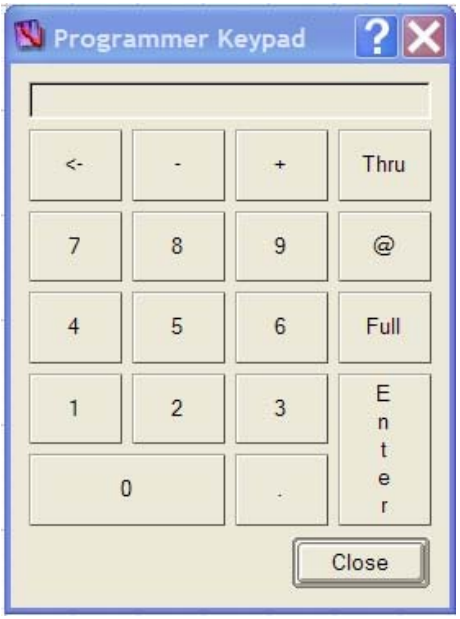
Another way to patch multiple fixtures is by using the on screen keypad.

To add multiple instances of a fixture, using the keypad you do this:

1. Select the fixture you want from the 'All fixtures' or 'By manufacturer' lists in the Fixture Type box.

2. In the DMX Universe field, Vista automatically displays the number of the currently selected universe. If you want to add these fixtures to another universe, enter the universe number.

3. If not already selected, click the Keypad button to display the on-screen keypad:



4. Use the keypad to type the Fixture / Unit number(s) and the DMX channel where you want this group of fixtures to start. For example:

- 1 Thru 5 @ 20
  will patch the current fixture type as unit numbers 1, 2, 3, 4, 5 starting at DMX channel 20 on the current universe.
- 1 Thru 10 – 3 Thru 7 @ 200 will patch the current type as unit numbers 1, 2, 8, 9, 10 starting at DMX channel 200 on the current universe.
- 100 @ 101 + 113 + 125 will patch the current type as unit 100 to DMX channels 113, 125 and 200 on the current universe.

Adding fixtures to your Favorites list

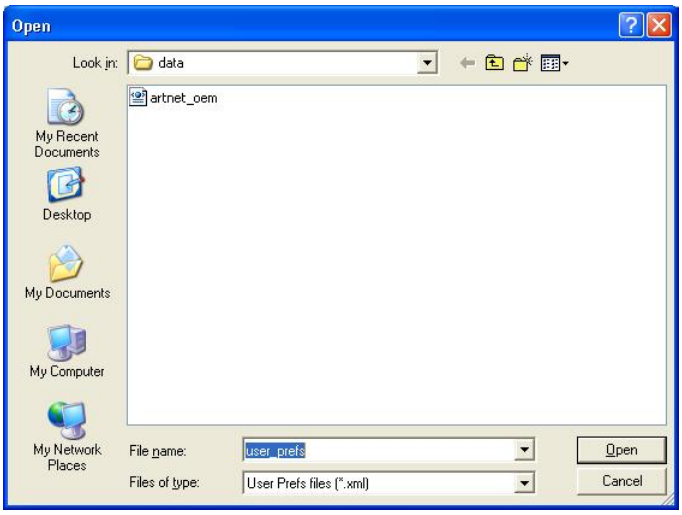
To add a fixture to your list of Favorites displayed in the Fixture types box, find the fixture in the Fixture type list, and drag it over the 'Favorites' entry in the list. Vista adds the fixture as an option.

Creating favorites folders

To help organise your favorite fixtures you can create folders within your Favorites list. To do this, choose the Create folder option from the pen pop-up (right click) menu. Vista creates a folder called 'New folder' which you can rename if you want.

Importing favourites

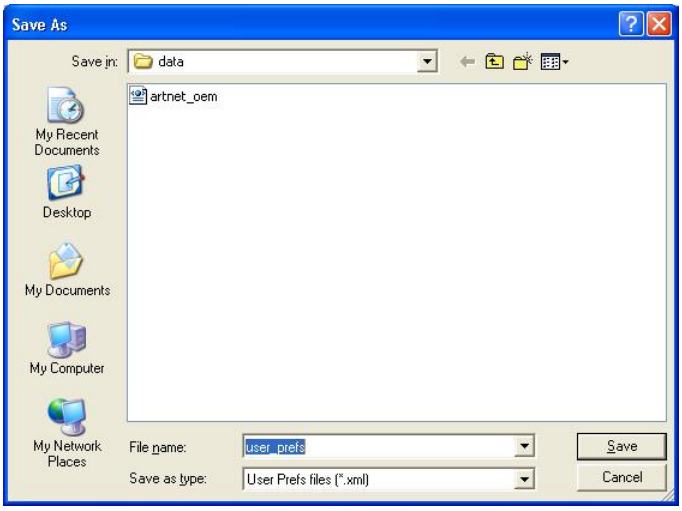
You can import an XML file listing the names of your favorite fixtures. To do this, choose the Import option from the pen pop-up menu. Vista displays the Open window:



Find the directory that contains the XML file with the names of your favourite fixtures, then select it click OK to load the list into Vista.

Exporting favourites

You can also export your favourites list to an XML file. To do this, choose the Export option from the pen pop-up menu. Vista displays the Save As window so you can name the file and choose a directory for it:



Changing universes

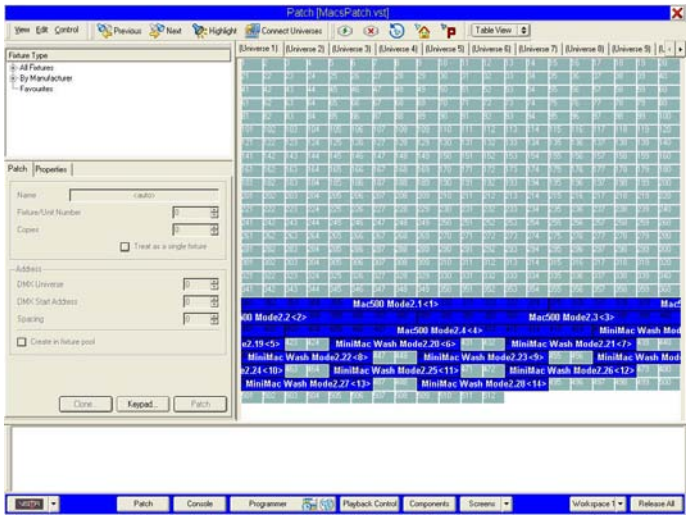
Each universe can only handle a certain number of fixtures, depending on the number of DMX channels each fixture needs. To add fixtures to another universe, just click the Universe tab at the top of the patch panel to display the next set of DMX channels.

Re-arranging fixtures on the patch panel

Moving fixtures around the patch panel

Once you've added fixtures to the panel you can re-arrange them however you want. Just select the fixtures you want and drag them to a new channel; when you take the pen off the screen, Vista re-arranges them all from that channel.

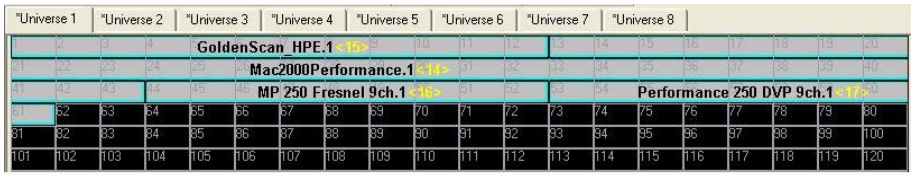
Note that you can't place them in such a way that any of the channels will 'fall off' the end of the universe. For instance, in our example the fixtures we've added take up channels 1 to 135, so we can't place that batch of fixtures any closer to the bottom of the universe than channel 379:



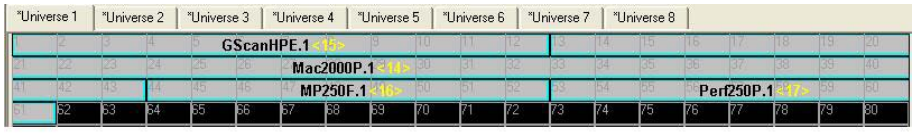
Displaying fixture short names

Vista has a standard abbreviated name for every fixture. To display these short names instead of the full-length names, choose the Short Names option from the View menu.

Here's an example of the Patch screen showing the full-length names:



And here's the same screen with the Short Names option selected:

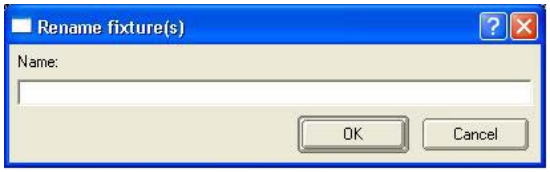


If you have short names selected and want to display the full-length names, select the Short Names option from the View menu again to restore the full names.

Renaming fixtures

To rename one or more fixtures, select them with the pen and choose the Rename option from the Edit menu. This command is also available from the pen pop-up menu.

Choosing the Rename option displays the Rename fixtures window:



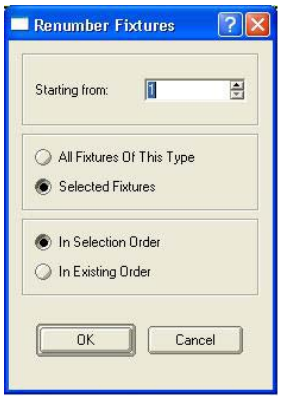
Enter the name you want to give the selected fixtures and click OK. Vista renames all the fixtures you had selected.

Renumbering fixtures

To change the unique system-wide ID number (e.g. <*12*>) of one or more fixtures:

1. Select the fixtures with the pen.

2. Choose the Renumber option from the Edit menu (this command is also available from the pen pop-up menu). Vista displays the Renumber fixtures window:



3. In the Starting From field, enter the new ID number. If you are re-numbering multiple fixtures, this will be the number given to the first fixture in the sequence.

4. If you want the change to apply to all the fixtures of this type in the current universe, instead of just the fixtures you selected, click the 'All Fixtures of this type' button. If you want to renumber the fixtures in the order in which you selected them, choose the 'In Selection order' button (this can be useful if you want to match the fixture numbers to a specific design layout).

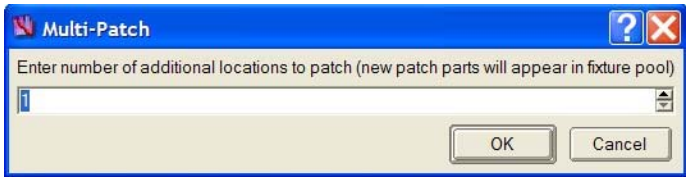
5. Click OK to renumber the fixtures.

Adding fixtures with the same ID

Often with fixtures such as dimmers you need to multi-patch or add extra copies of the same fixture at different DMX addresses. To do this

1. Select the fixture, you want to add to, in the patch window.

2. Choose the Multiple patch option from the Edit menu (this command is also available from the pen pop-up menu). Vista displays the Multi-patch window:



3. Enter the number of extra locations to patch .

4. The extra fixtures will be created in the Fixture pool with the same ID as the original.

5. Drag the extra fixtures to the required DMX channel

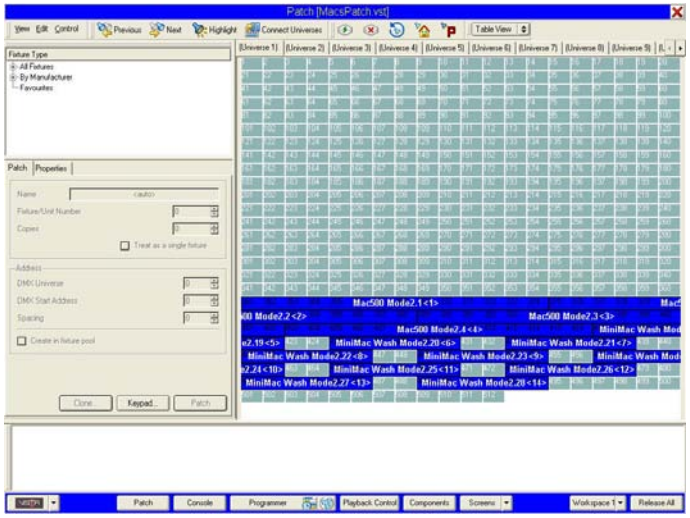
Swapping fixture types

One of the best features of the Vista is the ability to swap fixtures after you've patched them and programmed them to clips. This is particularly useful if you have to exchange one fixture for another (e.g. because of a breakage) because you can do so without having to re-program anything – Vista automatically adapts to the change.

To swap fixtures you must first put them into the pool.

Putting fixtures into the pool

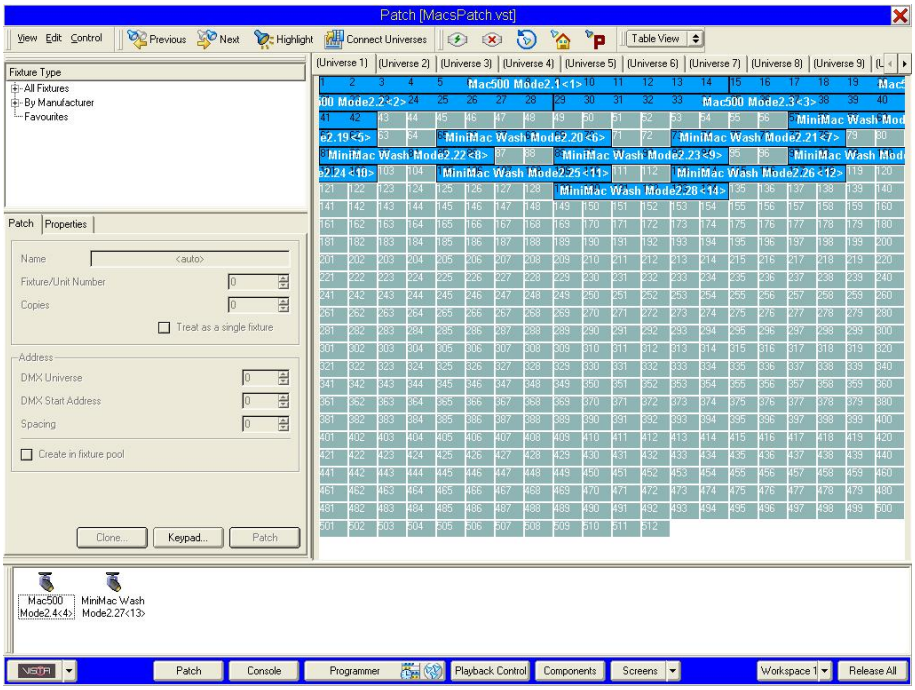
To do this, you drag and drop the fixtures you want to swap from the patch panel into the white area at the bottom of the patch panel, known as the 'pool':



Tip: You can also put a fixture in the pool by choosing the 'Unpatch' option from the pen pop-up menu.

The pool is also a handy place to store fixtures that you're going to want later but don't need right now. When you need them you can just drop them back into the patch panel without having to select them all over again from the Fixture type lists.

This example shows two of the fixtures we added above that have been dragged and dropped into the pool:



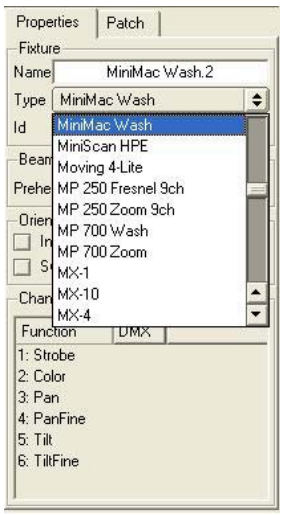
They'll just sit there until you pick them up and drop them back onto a channel.

Swapping a fixture type

While a fixture is sitting in the pool, you can change its type. To do this:

1. Select the fixture or fixtures in the pool you want to change. You'll notice that the Type drop-down list in the Properties box is now available.

2. Click the arrows beside the fixture name in the Type field to display the list of fixtures in alphabetical order:



3. Choose the type of fixture you want from the list. Note that you can type the first letter of the fixture's name on the keyboard to jump to that place in the list (e.g. pressing the letter 'A' takes you to the Acrobat 250 FE at the top of the list).

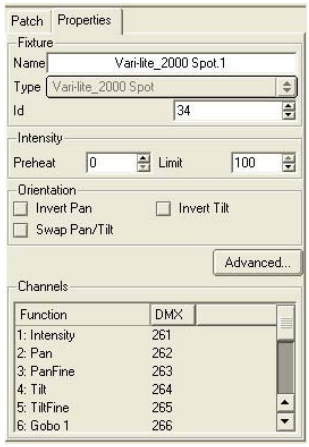
Deleting fixtures

You can delete fixtures from the patch panel at any time To do this, select the fixtures you want to delete and either press the Delete key or choose Edit:Delete.

Setting fixture properties

Once you've added the fixtures to the patch panel and placed them where you want them, you can set a number of properties for each fixture using the Properties box.

To view and set the properties for one or more fixtures, use the pen to select the fixtures you want on the patch panel. Vista displays the details of those fixtures in the Properties box:



Tip: If you select multiple types of fixture, Vista displays the details of the first type you selected. If the Patch box is currently displayed, press the Properties tab to display the Properties box.

This box has four sections that show you various properties of the fixtures you've selected.

Fixture

Name	The name you entered or Vista assigned to this fixture when you dropped it onto to the patch panel. You can edit this here if you want to.
Type	This field is only active when the selected fixture is in the pool at the bottom of the patch panel. You use it to change the type of fixture without having to remove it (see *Swapping a fixture type*).
Id	The unique system-wide ID number assigned to this fixture when you dropped it onto the patch panel. You can change this number here if you want to, but note that Vista won't allow you to use a number that's already assigned to another fixture.

Intensity

Preheat	A percentage value that sets the voltage the fixture lamp will sit at until you switch it on. This is useful for lamps such as Par 64s that take time to switch on from a cold start.
Limit	A percentage value that determines the maximum intensity the fixture will ever reach. This is useful if you want to prolong lamp life or prevent fixtures from ever reaching full intensity.

Orientation

Invert pan	Selecting this checkbox reverses the sweep of the pan for this fixture. This is useful when you're coordinating the sweep directions of fixtures hung in different directions.
Invert tilt	Selecting this checkbox reverses the sweep of the tilt for this fixture. This is useful when you're coordinating the sweep directions of fixtures hung in different directions.
Swap pan/tilt	Selecting this checkbox swaps the pan and tilt controls, so the fixture will pan when given a tilt command and vice-versa. This is useful for coordinating the movements of fixtures hung on vertical trusses or pipes.

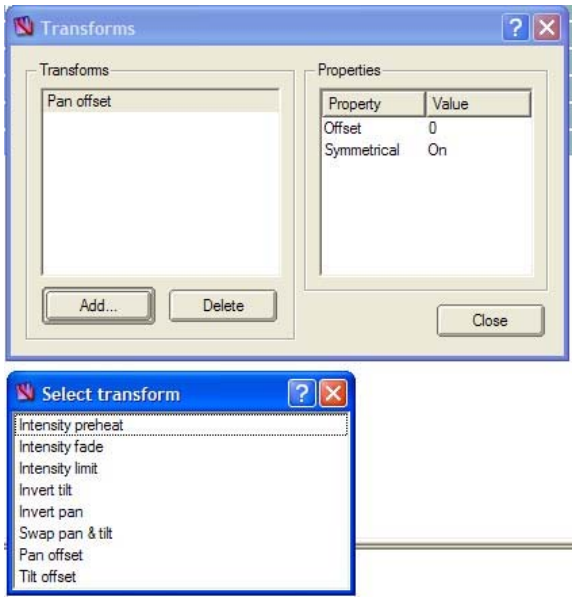
Channels

This is a list of the features of the fixture and which DMX channel is controlling each feature.

Advanced Properties

The advanced button provides access to a number of Fixture 'Transformers' that allow you to further customize fixtures. For example the Pan and Tilt Offset parameters allow you to correct the home position for fixtures that are hung at an angle.

To add a transform click the Advanced button to open the transform window then click the Add button to choose a transformer.



Some of the transformers are also available from the Properties tab as described above. To choose one of the advanced transformers click on Pan offset or Tilt Offset.

This option…	**does this…**
Offset	Sets the offset angle. For example setting a Pan offset of 45 would move the fixtures Home position by 45 degrees
Symmetrical	Determines whether the fixture has equal movement from both sides of the Offset position. For example a Fixture with a Pan range of 360 degree and an Offset of 45% would move 135 degrees in one direction and 225 degrees in the opposite direction. Since this might produce unexpected results with effects and other programming it's possible to set Symmetrical On however this will limit the fixtures movement. In this example it would mean the fixture would only move 135%, in each direction, from the Home position

Controlling the fixtures

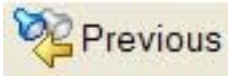
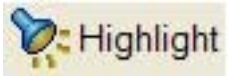
The Patch screen has five buttons at the top that give you control over whatever fixtures are currently selected on the Patch panel:

Note that only some fixture types support these functions; refer to the user guide for your fixture types.

This button…	**does this…**
Strike	Ignites the lamps in the selected fixtures.
Douse	Switches off the lamps in the selected fixtures off.
Reset	Resets the selected fixtures to their factory default settings. This is useful if a fixture has a control problem and you need to get it 'back to normal'.
Home	Puts the fixture back to its home position.
Park	Parks the fixture permanently in whatever setting it's currently in. Useful for providing permanent lighting for backstage and so on. Once you've parked a fixture it will ignore any further instructions.

Tip: These five commands are also available through the Control menu and by right-clicking on the fixture icons in the Programmer.

There are four other buttons on the toolbar at the top of the screen:

This button…	**does this…**
	De-selects whatever is selected and Selects the next fixture in this universe.
	Selects the previous fixture in this universe.
	Switches the selected fixture on. This is a toggle switch – while it's selected, Vista switches on fixtures as you select them.
	Displays the Connect Universes screen so you can attach external Ethernet-DMX interface boxes. See *Configuring external Ethernet-DMX interfaces.*

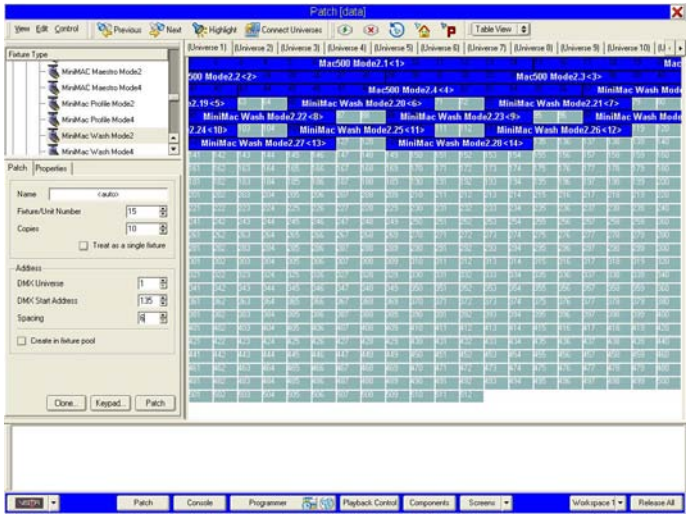
Viewing the patch in different ways

Vista gives you two different views of your patch so you can get different types of information about your patching configuration. To change the view, click the drop-down menu in the top-right corner of the Patch screen:

There are two options: Table and List and view.

Table view

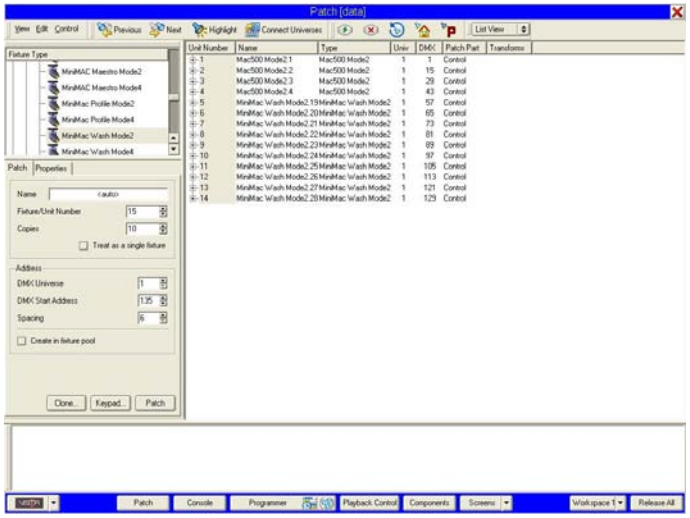
The Patch screen defaults to the Table view, like this:



This is the view you will use most of the time. Here you can drag and drop fixtures into the patch panel for each universe and arrange them the way you want them.

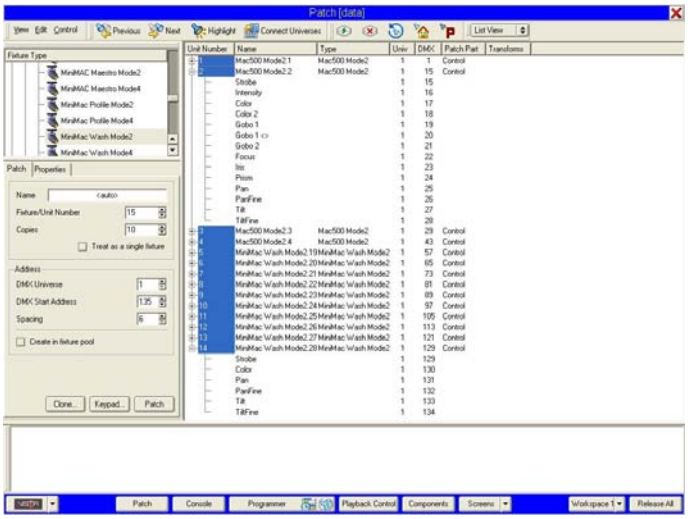
List view

If you choose the List option from the drop-down list, Vista displays the List view screen. To select fixtures in this view click on the Unit ID number(s):



This screen lists all the fixtures you've patched in global ID number order.

If you click on the '+' symbol beside a fixture's name, it displays the universe and DMX channel that each aspect of that particular fixture is using:



The Transforms column any advanced properties (transformers) that have been added to the fixture.

Tip: This column is only meaningful when you have a fixture that consists of two components (such as a colour changer in front of a Par). In this case the colour changer will show 'Control' in this column, and the dimmer will show 'Intensity'.

The Patch Part column shows one of two entries: Control or Intensity. 'Control' is all aspects of the fixture other than intensity.

Cloning fixtures

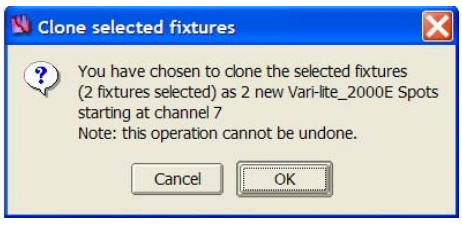
Cloning is a special way of adding fixtures to your patch. This method is useful if you want to add some fixtures after you've programmed your show and have the new fixtures automatically included in any Clips, Groups and Presets that you've already created.

To clone one or more fixtures do this:

1. Select the type of fixture you want to add from the 'All fixtures' or 'By manufacturer' lists in the Fixture Type box.

2. Select the fixture(s) you want to clone from the Patch table or list view

3. Click the Clone button. Vista displays the Clone Selected fixtures window:


Clone selected fixtures
You have chosen to clone the selected fixtures (2 fixtures selected) as 2 new Vari-lite_2000E Spots starting at channel 7
Note: this operation cannot be undone.
Cancel
OK

4. Click OK to confirm and the new fixtures are added to the patch.

Importing and Exporting Patch information

To save timeVista allows you to import and export patch information from a Comma Seperated Values (CSV) file.

Exporting the Patch

You can export your patch to a CSV file. To do this, choose the Export Patch option from the edit menu. Vista displays the Save As window so you can name the file and choose a directory for it.

Importing the Patch

You can also import a CSV file containing your patch information. The easiest way to do this is to create a spreadsheet laid out as follows and save it as a CSV file.

ID	Univ:Ch	Fixture Type	Fixture Name
1	1:1	Vari-lite_2000E Wash	Vari-lite_2000E Wash.1
2	1:16	Vari-lite_2000E Wash	Vari-lite_2000E Wash.2
3	1:31	Vari-lite_2000E Wash	Vari-lite_2000E Wash.3
13	1:401	GenericDimmer	GenericDimmer.1
13	1:332	GenericDimmer	GenericDimmer.1
14	1:402	GenericDimmer	GenericDimmer.2
15	1:403	GenericDimmer	GenericDimmer.3
25	2:1+3:1	VL5 Mode3	VL5 Mode3.1
26	2:11+3:2	VL5 Mode3	VL5 Mode3.2
35	3:21	Not Sure	

In our example above the spreadsheet has a header row, this is optional but shown here for explanation. The columns are laid out like this:

- an **ID** (*1*), which determines the Fixtures unique ID. Required
- a **Universe : DMX address number** (*1:1*), that sets the Universe and DMX start address for this fixture. Required
- a **Fixture Type** (<*Vari-lite_2000E Wash* >), that sets the type of fixture that will be patched. Required – see note below
- a **Fixture Name** (<*Vari-lite_2000E Wash.1*>), that sets the fixture name. Optional

The ID, Universe:DMX Address information must be in the CSV file. The Fixture Type must also be specified. However if a valid Vista Fixture name is not specified you will be prompted to choose the correct fixture name, from a list, during the import process. If the Fixture name is not specified the default Vista name will be used.

Configuring external Ethernet-DMX interfaces

Vista provides four internal 512-channel DMX outputs (or universes) through the desk's internal Ethernet connection. You can add up to twelve more by connecting your own external ArtNet or PathPort boxes to the Ethernet port.

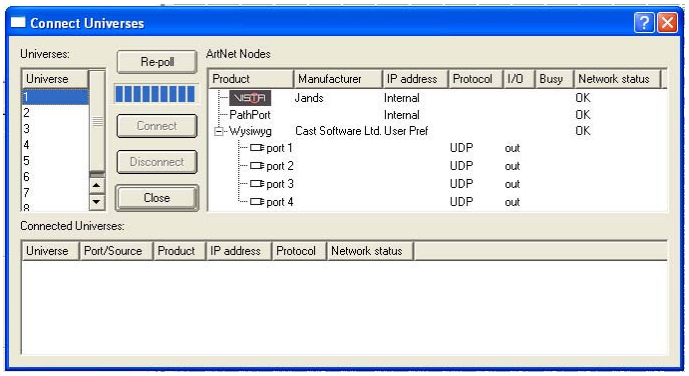
To configure these connections, press the Connect Universes button on the Patch screen toolbar.

This screen shows the ArtNet nodes connected to the Ethernet output of the console, and the connection details of universe. You use it to set up the DMX connections for each of your universes and to check that they are working correctly.

Tip: If you're only using four Vista's internal universes you don't need to use this screen.

Connecting external Ethernet-DMX interfaces

The *ArtNet nodes* box on this screen lists all the Ethernet-DMX connection interface boxes attached to the Vista:



In this example you can see two entries: one is the Vista logo, representing the internal Ethernet connection; the other is 'Pathport', which is an external interface box attached to the back of the console.

You can have up to twelve external interface boxes connected, which, when added to the four internal ones, gives you a total of sixteen universes.

To connect an external interface box:

1. Select the universe you want to run through a particular box from the Universes list in the left hand side of the screen.

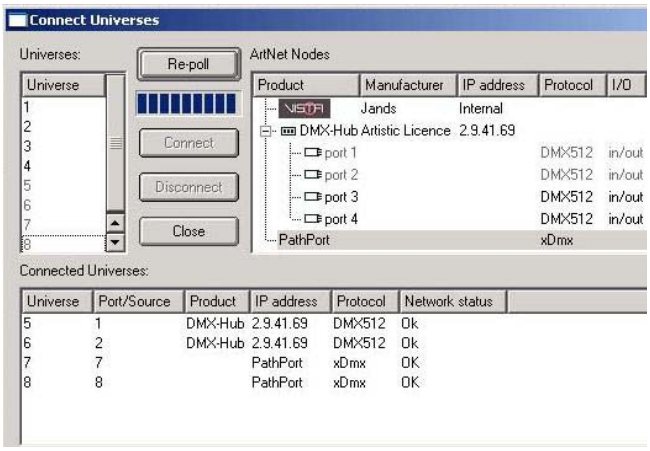
2. Click on the box title in the ArtNet nodes list to select it, then click the Connect button. Depending on the type of interface box you are using Vista will either connect automatically, or display the Enter External DMX source window:

3. Click on the arrows beside the Source field and choose the number of the universe in the box you've connected to. For example, if you've set up a PathPort box to handle universes 7 and 8, you'd choose one of those numbers on this window.

Vista polls the box to check that the connection is working, and displays the details of the connection in the Connected Universes box. It also greys-out the number of the universe you've connected to in the Universes list.

You can check this connection at any time by clicking the Re-Poll button.

This example shows a Vista with an Artistic Licence DMX Hub with four ports and a PathPort with two ports connected:



Note that in this example, universes 1 to 4 have been left as Vista internal universes, and the external boxes have been connected to universes 5 to 8.

Disconnecting an interface box

To disconnect an interface box:

1. Click on the title of the interface box in the ArtNet nodes section of the screen.

2. In the Connected Universes section of the screen, click on the connection you want to remove.

3. Click the Disconnect button. Note that when you disconnect an interface, the universe it was connected to becomes available once more in the Universes list.

Tip: To change the settings of an interface box you have to disconnect it and re-connect it with the new settings.

Setting up your fixtures

Once you've patcheded your fixtures you're ready to fire them up and start setting intensity, colour, position and so on.

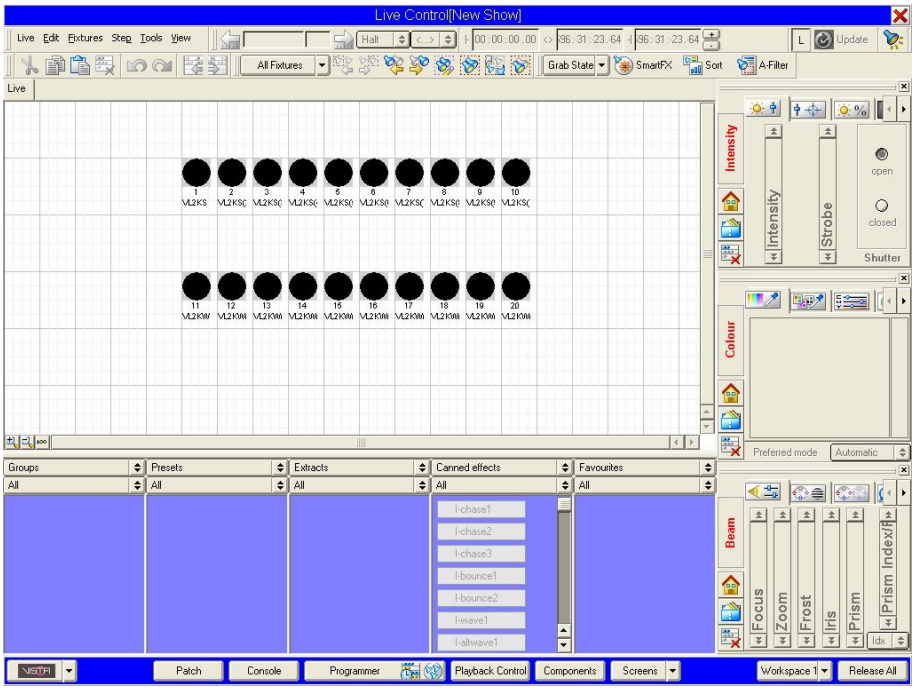
The Programmer – about the Live and Clip Tabs

Vista let's you control fixtures live from the programmer and also edit one or more clips at the same time. Anytime you open the Programmer you'll see a "Live" tab at the top of the window, if you choose a Clip to edit it will open in it's own tab. To switch between tabs just click on the tab you want to work on. For more information about editing clips and working with the Programmer tabs see *Working with Clips* :

The Programmer - Fixtures screen

To get all your fixtures up and running you tap the Programmer button on the toolbar at the bottom of the screen. If this is the first time you've opened this window you should be in the Live tab, otherwise click on the Live tab to make it active.

Vista displays the Fixtures screen. This example shows a rig of ten Vari-lite 2000 Spots and ten 2000 Wash fixtures:



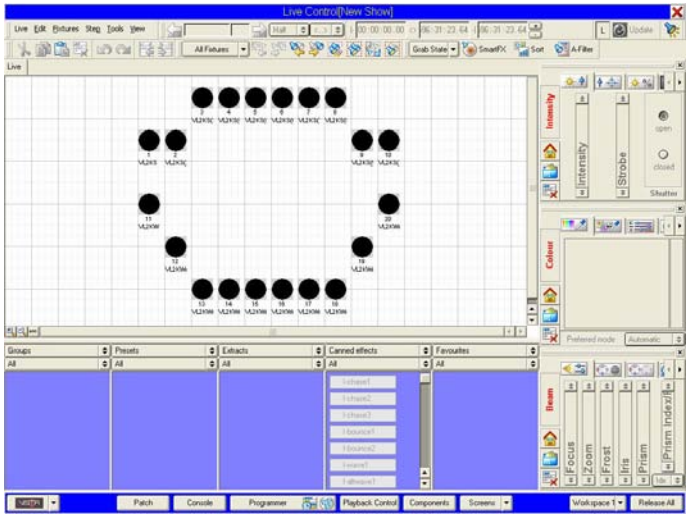
This screen consists of three main elements:

- the Top view panel, where you can display and arrange the fixtures to match the plan view of your lighting rig. This panel can also display the Timeline when editing a Clip
- the Bottom view panel, where you can assign fixtures into meaningful groups. This panel can also be set, in the Fixture Layouts dialogue, to provide access to other components such as Presets, Effects, Clips and so on. This view is called the Quick Picker
- the Intensity, Colour and Beam palettes, where you adjust the settings for each fixture.

Arranging fixtures in a layout

Vista displays all of the fixtures you added on the Patch screen as icons on the Programmer Fixture screen. When you first view this screen, the fixtures are arranged in numerical order by Unique ID as a bank of icons, as shown in the example above.

If you want to, you can drag and drop the fixture icons around to new locations on the screen so that they match the layout of your lighting plan, as in this example:



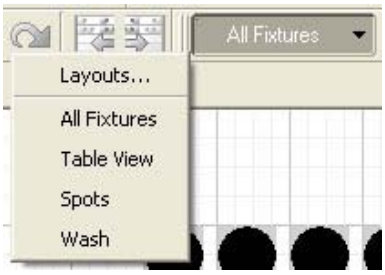
You can choose how Vista represents the fixtures from the Fixtures Arrangements option in the View menu:

This option…	**does this…**
Show Table	Displays the fixtures as ‘cells’ in numerical order in groups of 300
Show Icons	Displays the Fixtures as .icons.

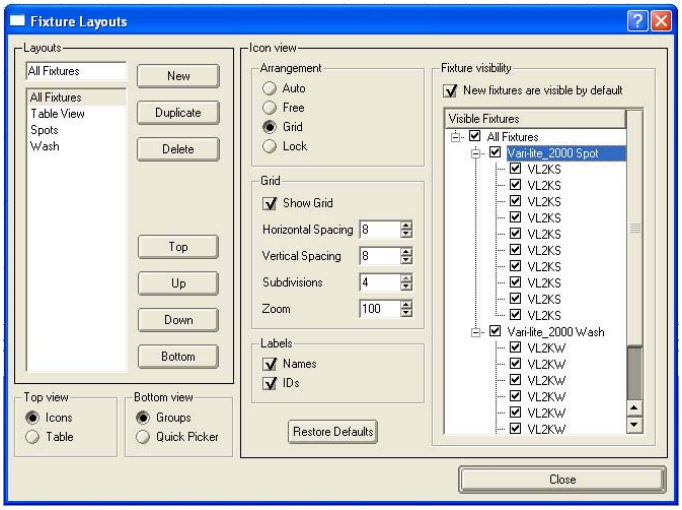
Using different layout views

You can create as many different views of your fixtures as you like, each sorted and arranged in its own away. To create or modify a view:

1. Click the Layout view selector on the toolbar and select the Layouts… option:



Vista opens the Fixture layouts window:



2. Click the New button to create a new layout or click the Duplicate button to create a copy of an existing layout:

3. Click in the Name field and type a name for the view.

4. Set the way the fixtures are represented in the layout:

This option…	**does this…**
Icons	The default setting. Vista displays each fixture as an icon that displays Intensity Colour Position etc.
Table	Displays the fixtures as ‘cells’ in numerical order in groups of 300. Note that in this view you can’t re-arrange the order or position of the fixtures, you can only assign attributes to them using the Palettes.

5. Set the options to determine how Vista displays and arranges the fixture icons:

This option…	**does this…**
Auto	The default setting. Vista arranges the icons in numerical order by Unique ID number.
Free	With this setting selected you can drag and drop icons anywhere on the Fixture panel.
Grid	With this setting selected you can drag and drop icons anywhere on the Fixture panel but when you let go, Vista automatically 'snaps' the icon to the nearest line of the layout grid.
Lock	Once you've got icons where you want them, choose this option to lock them in place so you don't move them by accident.
Show Grid	Tick this checkbox to display the layout grid
Horizontal Spacing	Sets the amount of horizontal space (or padding) between fixture icons and the grid. Measured in pixels.
Vertical Spacing	Sets the amount of vertical space (or padding) between fixture icons and the grid. Measured in pixels.
Subdivisions	Sets the number of divisions within each cell of the main grid. Icons will snap to main or subdivision grid lines.
Zoom	Sets the zoom level of icons for this layout. 10% - 150%.
Names	Displays the Fixture name (type and number) below the icon.
IDs	Displays the Fixture unique ID below the icon.
Restore Defaults	Click this button to restore the icon settings to their default values.

Hiding and 'unhiding' fixtures

You can hide any fixtures or fixture types in a layout. This removes them from the display, but not from the patch.

To hide a fixture:

1. Click the + symbol beside the All Fixtures heading in the Visible Fixtures column to show all the Fixtures types that you've patched.

2. To hide all Fixtures of a type, un-tick the checkbox beside that fixture type, or click the + symbol beside a fixture type to show all the individual Fixtures of that type.

3. To hide individual Fixtures of a type un-tick the checkbox beside the fixture(s) you want to hide.

To reveal (unhide) hidden fixtures, tick the checkbox beside the fixture(s) you want to reveal.

Duplicating, deleting arranging and activating layout views

To duplicate a layout view, choose the Layout name from the list and click the Duplicate button.

To Delete a layout view, choose the Layout name form the list and click the Delete button.

To arrange the order that layouts appear in the list, choose the Layout name from the list and click the Up, Down, Top or Bottom button.

To activate a layout view, click the Layout View selector on the toolbar and select the layout name you want to display.

Selecting what to display in the Bottom pane of a layout

The Fixture Layout window is divided into a Top and Bottom pane.

To set what is displayed in the bottom bottom pane select the Groups or Quick Picker checkbox:

This option…	**does this…**
Groups	The default setting. Fixture Groups are displayed in the bottom pane.
Quick Picker	With this setting selected the lower pane is divided into columns that can be set to display Groups, Presets and othe components.

To adjust the amount of space allocated to each pane, click on the divider bar and drag it up or down.

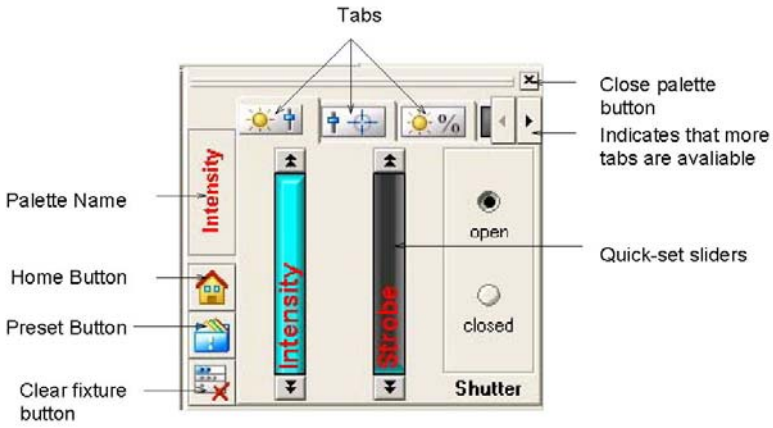
Using the intensity, colour and beam palettes

The Programmer screen usually has three ‘palette’ windows down the right-hand side. These palettes give you control of the three main aspects of lighting fixtures: intensity & position, colour and beam. All the palettes work in much the same way, so once you’ve mastered one of them, the others will be easy.

To set attributes for one or more fixtures, select the fixtures you want in the Fixture panel, then click on the Palette you want to use.

Common features of the palettes

This example shows the Intensity palette with a number of fixtures selected in the Fixture panel and the intensity set to 100%:



All three palettes have a few things in common:

This button…	does this…
	Tabs along the top that display the different control sets available in each palette. The arrow symbols to the right of the tabs indicate that there are more tabs available. Click the arrows to display them. While each Palette has different tabs, they all have a 'Raw DMX' tab that you can use to program attributes outside the control of the generic fixture model (see *About the generic fixture model*).
	The 'Home' button. Clicking this resets the selected fixtures to their default parameters *for that tab*. For instance, clicking this on the Intensity tab resets the fixtures' intensities to zero.
	The Components or 'favourites' button. Clicking this displays the Components window where you can select Presets, Extracts etc. See *Creating presets* for details.
	The Clear Fixture button. Clicking this removes all attributes *for that tab* that have been set for the selected fixtures.
	Close palette button. Clicking this removes the palette from the screen. To re-display a palette you've closed, choose it from the View:Control Panels menu.

This button…	does this…
	Slider bar, usually showing a percentage setting. This is a quick and easy way to set a non-precise value. To adjust it, either: • click the double-arrows at the top or bottom to go to 100% and 0% respectively • click and drag the blue bar to set the value you want • click above or below the top of the blue bar to increase or decrease it in small increments.

Checking that everything is working

One of the first things you'll probably want to do after setting up your rig and patching it all in on the Patch screen, is check that everything's working. The quickest way to do this is to select the fixtures, one-by-one or in groups on the Fixture panel, and crank the intensity and colour up a bit.

To do this:

1. Select one or more fixtures in the Fixture panel.
2. Click anywhere in the colour rainbow on the colour palette
3. Click the double-arrow icon at the top of the Intensity slider on the intensity palette. Vista instructs all the selected fixtures to show that colour at full intensity.

Tip: You can also use the encoder wheels to set Intensity, Position, Colour and any other parameter. (Use Using the Console Hardware -Live control features)

Setting intensity and position

The Intensity palette controls fixture intensity and position. It has four tabs along the top:

- Intensity
- Position
- Intensity %
- Raw DMX.

Intensity

The default setting for the Intensity palette is the slider tab:

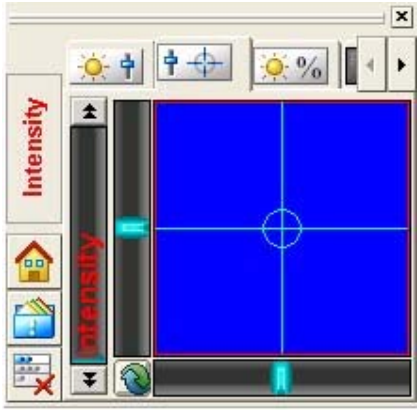
On this tab:

- the Intensity slider controls the intensity of the selected fixtures in a percentile range
- if the selected fixtures have a strobe capability, the Strobe slider controls the speed of the strobe
- if the selected fixtures have blackout shutters, the Opened and Closed buttons set the shutter position.

You'll notice that as you change the intensity settings, the icons on the Fixture panel change to reflect this.

Position

The Position tab gives you control of the direction in which the selected fixtures are aimed:

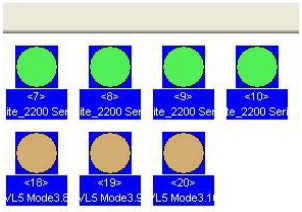


To adjust the position, either:

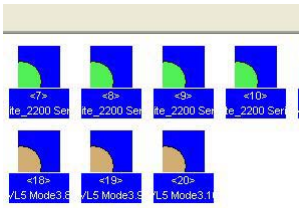
- click on the round target symbol and drag it to the spot you want
- use the slider bars along the X and Y axes to set a more precise position.

You'll notice that as you change the position settings, the icons on the Fixture panel change to reflect this, as these examples show:

Before…

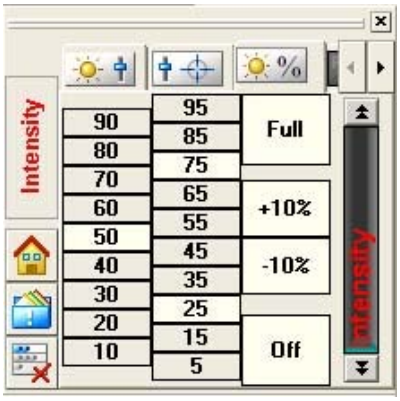


After…



Intensity by percentage

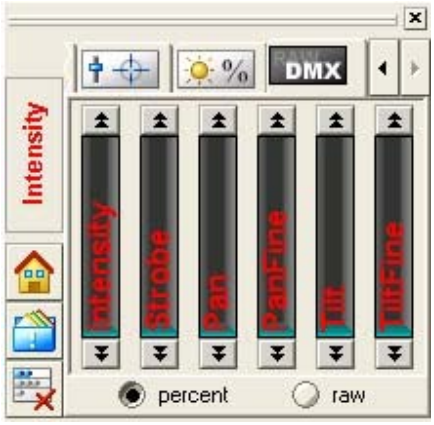
A more precise way to set intensity is with the second Intensity tab. This provides percentile bands in 5% increments:



Just click on the level you want to set it. To increase or decrease it in 10% increments, click the + or – 10% buttons. To set it to full or zero, click the Full or Off buttons respectively.

Setting raw DMX intensity and position values

The Raw DMX tab gives you fine control of all of the intensity and position attributes, but remember that any settings you make here are not recorded by the generic fixture model, so if you change the fixture you'll also have to re-program all these details.



Click the Percent button to set the sliders to a percentage, or the Raw DMX button to set the sliders to adjust actual DMX values from 1 to 255.

Setting colour

The Colour palette provides four tabs so you can choose the way you want to set your colours:

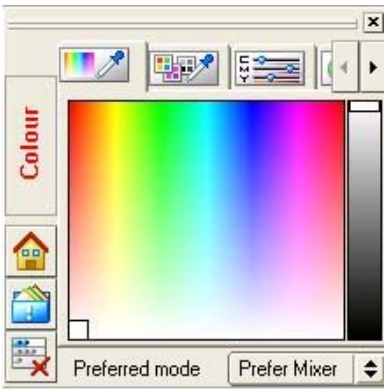
- HSV – hue and saturation values
- Lee – manufacturer gels swatchbook
- CMY – Cyan, Magenta, Yellow or Red, Green, Blue sliders
- Colour wheel – for fixtures that have colour wheels.

The Colour Palette also has a 'Preferred mode' drop down list at the bottom that contains three options:

- Automatic – when you pick a colour for a fixture that has both a colour wheel and a colour mixer, Vista uses the Colour Wheel for the Lee and Wheel Tabs and uses the Colour Mixer for the HSV and CMY tabs
- Prefer Fixed – select this when you want the HSV and CMY tabs to use the colour wheel – this may result in a near match colour.
- Prefer Mixer - select this when you want the Lee and Wheel tabs to use the Colour Mixer.

Hue and Saturation values

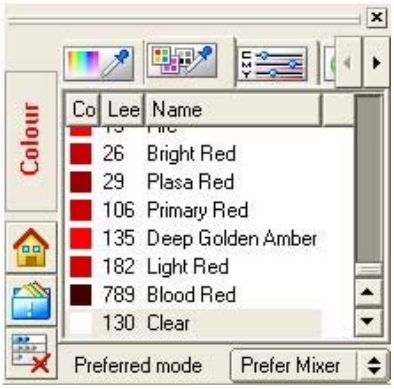
The HSV tab provides a colour spectrum and a saturation slider:



To pick a hue and its saturation, just click on the shade you want in the spectrum area, and drag the slider bar on the right hand side to set the saturation level.

Manufacturer gels

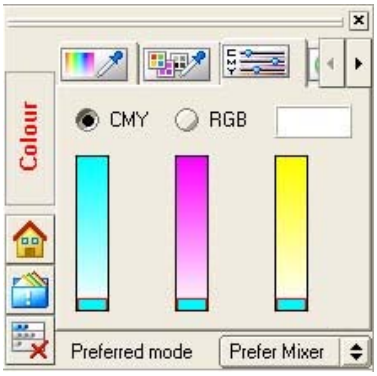
This tab provides the actual gel colours, numbers and names from the Lee swatchbook so you can pick the exact shade you want:



Click in the Colour, Lee or Name column headings to sort the list by name number or colour.

Cyan, Magenta and Yellow/Red, Green Blue

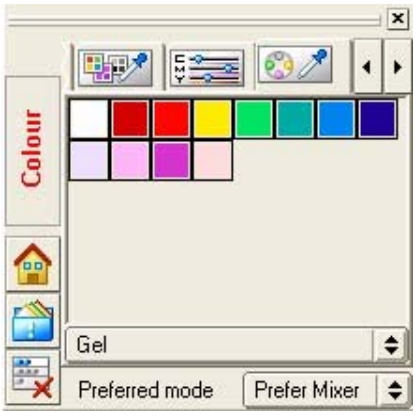
This tab gives you the option of setting your colour using either CMY or RGB values:



Click the relevant button to choose the method you want, then adjust the sliders to set the colour.

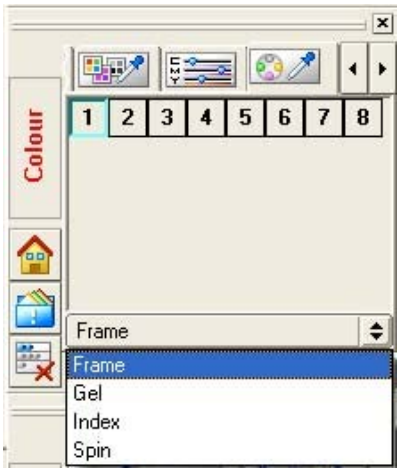
Colour wheel

When using fixtures with colour wheels, you can use this tab to set the precise colour on the wheel that you want this fixture to use:



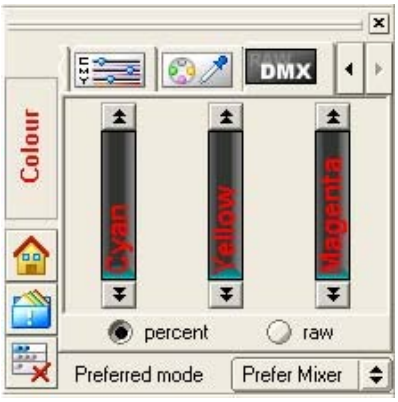
Just click on the colour swatch to select it.

You can also select by frame Number and set wheel spin by choosing from the drop down at the bottom of this tab.



Raw DMX colour

The raw DMX tab gives you control of the colour either as percentage CMY values or as actual DMX values from 1 to 255. Remember that any settings you make here are not recorded by the generic fixture model, so if you change the fixture you'll also have to re-program all these details:



Click the Percent button to set the sliders to a percentage, and the raw DMX button to set the sliders to adjust actual DMX values from 1 to 255.

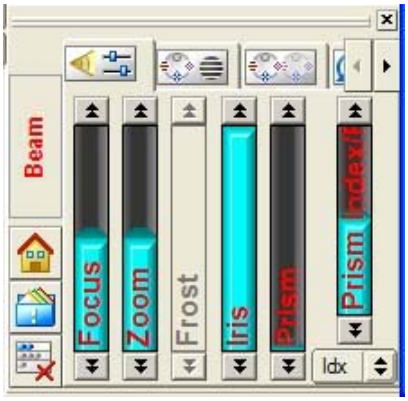
Setting beams and gobos

The Beam palette has six tabs for controlling beam and gobo attributes:

- Beam
- Gobo
- Gobo Wheels
- Rotation (< >)
- Framing
- Raw DMX.

Beam

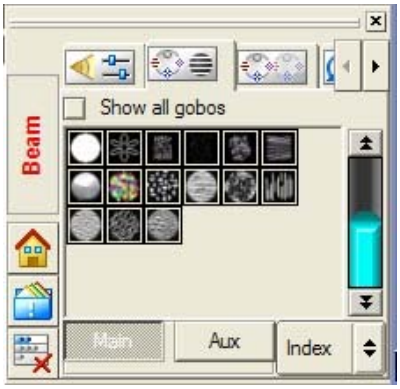
The Beam tab controls the focus, zoom, frost, iris and prism settings, including index and rotate, of the selected fixtures:



Use the sliders to adjust these values.

Gobos

The Gobo tab displays icons of the gobos available on the selected fixtures:



If you have only one type of fixture selected, the icons Vista displays represent all the gobo types of that fixture.

To choose a gobo, click on the icon representing the gobo shape you want. To display all the gobos, whether they are available on your fixtures or not, check the 'Show all gobos' checkbox.

If you have more than one type of fixture selected, Vista displays all the gobo types offered by *all* the fixtures. Note that just because the gobos are displayed doesn't mean they are available to all the fixtures.

Some fixtures have two gobo wheels. You use the Main and Aux buttons to set a gobo from one wheel and a second gobo from the other wheel. Vista lets you select any gobo as the main gobo and any gobo that is not on the same wheel as the Aux gobo.

If you select the Main button and choose a gobo, Vista updates the icons on the Fixture panel to reflect your choice. Now if you select the Aux button the gobos that are not available, because they are on the same wheel, have a white border around them, If you select one of the available icons Vista updates the icons on the Fixture panel to reflect your combined choice.

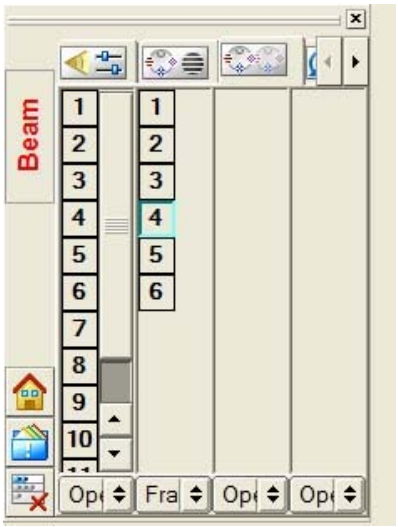
Some fixtures allow you to rotate the gobo you have selected. If your fixtures allow this you can use the slider to index (set a position) or rotate (continuously spin) one or both of the gobos.. The options are:

- Index – move the slider to rotate the gobo wheel to the preferred gobo position
- Rotate – move the slider to rotate the gobo at different speeds

Tip: Gobo information stored using the Main – Aux method is stored generically so it is preferable if you are likely to swap fixture types. It's not possible to set half frame gobo positions or spin the wheel using this method.

Gobo Wheels

The Gobo Wheels tab provides a direct control method for fixtures that have up to four gobo wheels. You can use this tab to make gobo selections by their position on the wheel:



Choose the method you want to use to control the gobos from the drop-down menus at the bottom of each slider. The options are:

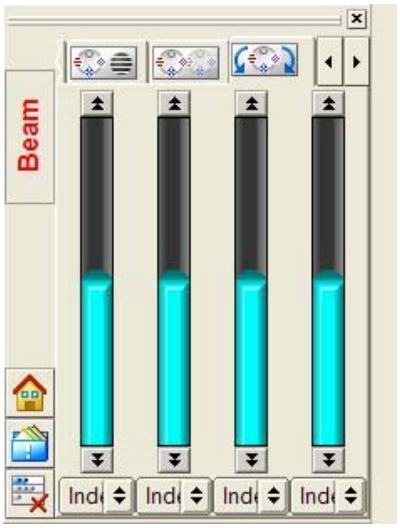
- Open – sets the gobo wheel to the open position
- Frame – set the frame number of the gobo on the fixture's gobo wheel (position 1 is usually 'open')
- Index – choose by moving the slider to rotate the gobo wheel to the preferred gobo position
- Spin – set the gobo wheel to rotate through its frames

If you choose the 'Spin' option, Vista sets the slider to halfway, representing 'zero'. Increasing the slider to a positive value starts the gobo wheel spinning in the direction from frame 1 upwards. The further you push the slider the faster it spins.

Dragging the slider down starts the gobo wheel spinning backwards from its highest frame number to its lowest. Again, the further you drag the slider, the faster the gobo wheel spins.

Rotation (< >)

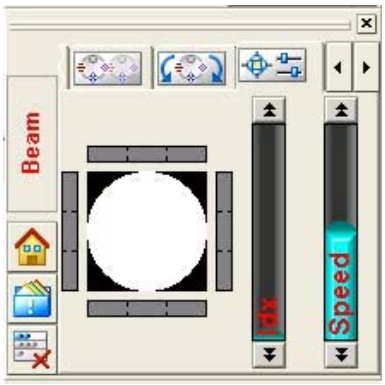
The Rotation tab controls the angle or rotation of rotating gobos:



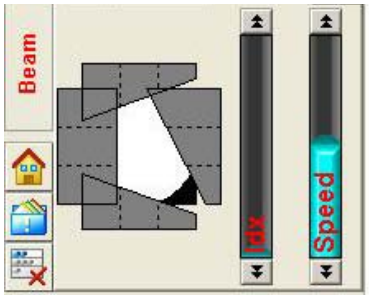
You can set these values by Index or Rotation. The Rotation slider works in the same way as on the Spin slider on the Gobo Wheels tab.

Framing

The Framing tab is specifically for fixtures that have beam shaping frames, so you can shutter-off parts of the beam:



To set the positions you want the frames to be in on the selected fixtures, click and drag each frame to the position you want, as shown in this example:



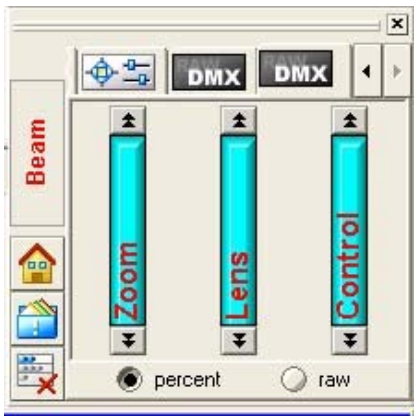
You can also set the rotation angle of the shape or continuously rotate the whole shape using the slider.

Choose the method you want to use to control the framing from the drop-down menus at the bottom of the slider. The options are:

- Index – choose by moving the slider to rotate the framing shutters to the preferred angle
- Spin – set the whole shutter assembly to rotate.

Raw DMX

The Raw DMX tab gives you control of the gobo settings either as percentage CMY values or as actual DMX values from 1 to 255. Remember that any settings you make here are not recorded by the generic fixture model, so if you change the fixture you'll also have to re-program all these details:



Assigning fixtures to groups

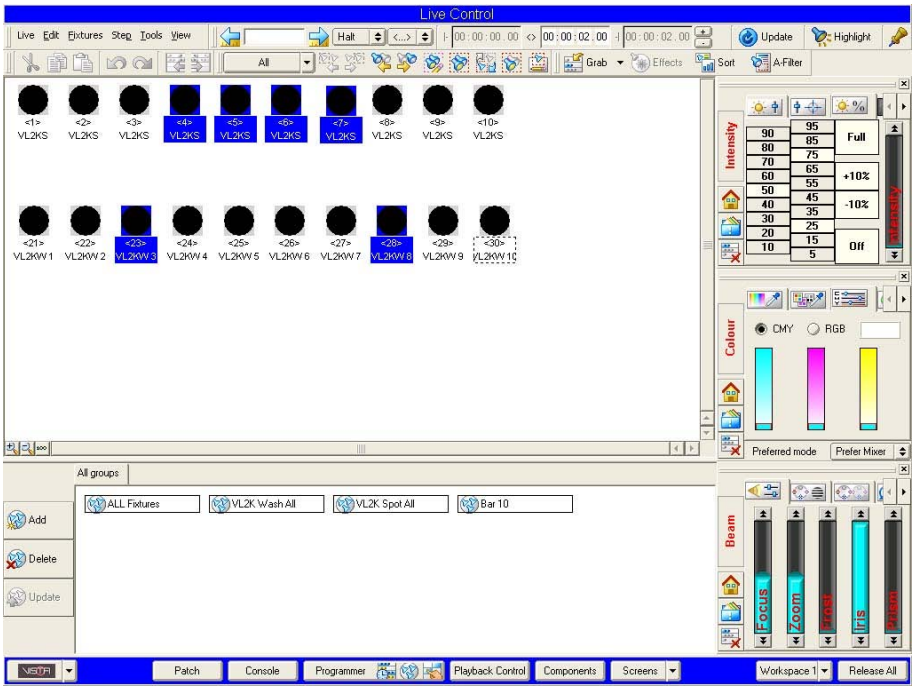
If you have a big rig, the last thing you want to do is manipulate dozens of individual fixtures. To make it easy to control all the fixtures in your rig you can assign them to groups.

A group can consist of any number of any type of fixtures; it's entirely up to you what you put in a group. Some typical groups might be all the fixtures of one type, all the fixtures on the back truss, or all the fixtures you're using on one particular part of the stage.

Creating groups

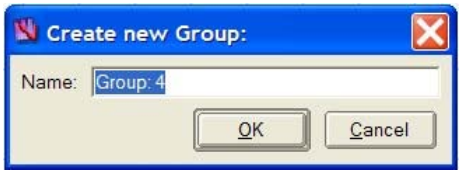
When you are first creating groups it's easier to be in a layout that shows the Groups panel at the bottom of the screen. If you are seeing the Quick Picker instead of the Groups panel at the bottom of the screen right-click in the Fixture pane and select "Layout Properties". In the Fixture Layouts window select the Groups option for the bottom view. To create a group:

1. Select the fixtures you want in the group:



2. Click the Add Group button on the left hand side of the Group panel:

Vista opens the Create New Group window:



3. Type a name for the Group and click OK or press Enter. If you don't want to name the Group right away you can accept the suggested name and rename it later.

There are two mode buttons on the left side of the Group pane.

In Apply mode when you click this group icon, Vista automatically selects all the fixtures in it. You can then assign attributes to all the fixtures in that group using the palettes. The Edit mode is used when organizing groups as described below.

You can create as many groups as you want, and you can also create any number of 'groups of groups'.

Organising groups

At the top of the Group panel there is a tab entitled 'All Groups'. This tab always contains all the groups you have created.

To add another tab, right-click in the area to the right of the existing tab and choose the Add tab option. This creates a new tab along the top of the Group panel. To rename the tab, click on it and enter a title.

In Edit mode you can drag and drop groups from the All groups tab to other tabs so you can arrange your groups in a meaningful way. You can also drag groups into different columns or positions.

Fanning

To fan a selection of fixtures:

1. Select the fixtures in the Programmer Fixture window.
2. Select the palette whose attribute you want to fan (e.g. colour, position).
3. Hold down the yellow modifier button on the console. (Ctrl key on the PC version)
4. Click and drag on the attribute window or roll any of the encoder-sets on the console to fan the selected fixtures.

Creating presets

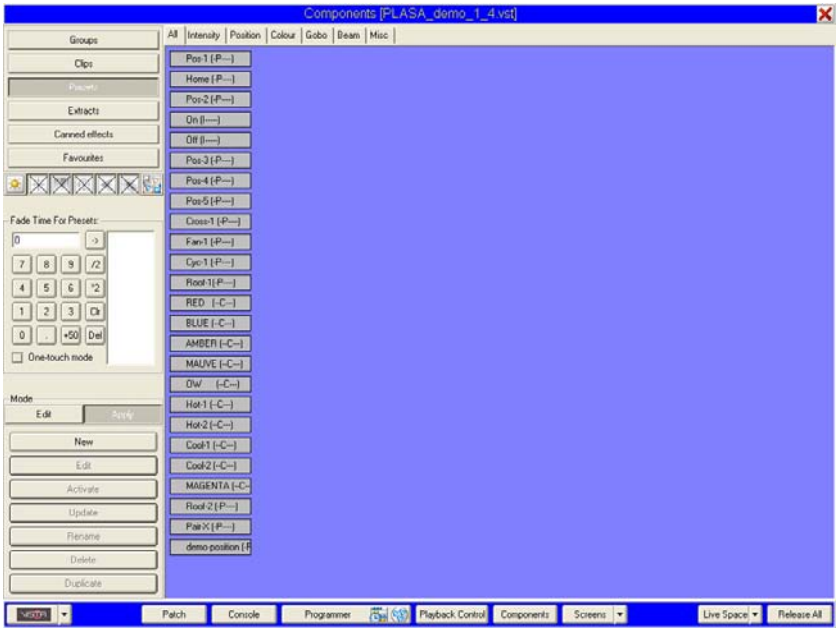
You use the Components button on each of the palettes to create preset values for the main fixture attributes of intensity, position, colour, gobo and beam. This is a useful way to create pre-defined values that you can assign quickly to any number of fixtures without having to adjust the settings individually for each one.

Presets are the 'building blocks' that you use to create clips. They represent common sets of attributes that you know you're going to want to use over and over again, such as a particular position (e.g. on the drummer).

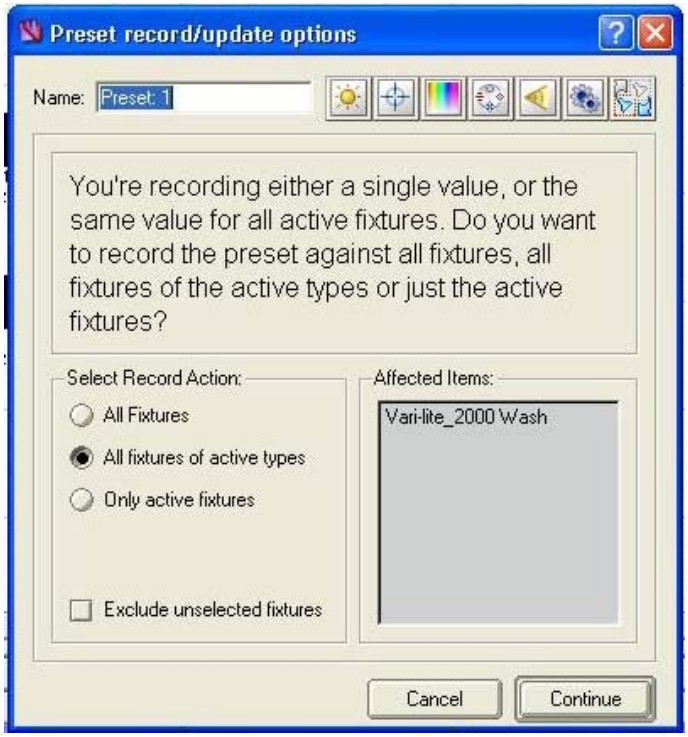
To create a preset:

1. Set the values on the palette the way you want them.
2. Click the component button on that palette:

Vista displays the Components window:



3. Click the New button to display the Preset mode window:


Preset record/update options
Name:
Preset: 1
You're recording either a single value, or the same value for all active fixtures. Do you want to record the preset against all fixtures, all fixtures of the active types or just the active fixtures?
Select Record Action:
All Fixtures
All fixtures of active types
Only active fixtures
Exclude unselected fixtures
Affected Items:
Vari-lite_2000 Wash
Cancel
Continue

4. Enter a name for the preset in the Name: box

5. Use the filter bar (as described below) to select or deselect the features you want to include in the preset.

6. Click one of the buttons to choose whether you want this preset to apply to all the fixtures in your rig, all the fixtures of the type you've currently selected, or only those fixtures currently selected.

7. Click the Continue button. Vista creates a new Preset icon in the window that contains all the attributes you defined on that palette.

Tip: Note that presets are normally *per-palette*, i.e. you create separate presets for intensity, colour, gobo and beam (and miscellaneous parameters). The filters on the palette screen determine which types of presets Vista displays at any time:

Each button represents a type of preset parameter:

	Intensity
	Position
	Colour
	Gobo
	Beam
	Miscellaneous (i.e. parameters that don't fit in the above groups).

Note that the filters apply when storing and when recalling a preset. This means that whatever attributes are masked when you store the preset are excluded from it, and whatever attributes are masked when you recall it are not applied.

Updating presets

You can use the Programmer to update the information stored in a preset.

To do this:

1. While a editing the clip, select the fixtures you want to change or add to the preset.
2. Make the adjustments you want using the palettes.
3. Open the Components window, select the preset and click the Update button. You can also Right-Click the preset in the Quick Picker and select Update from the popup menu.
4. Vista displays the Preset Record / Update options.

Tip: You can also update Presets when you Update a clip, that's being played back. *See Using the Live tab to update Clips during playback on Page 83*

Editing presets

You can use the Programmer to add, remove or change information stored in a preset, there are two ways to open a preset for editing:

- In the Components window you can select the Preset and click on the Edit button , or
- you can select the Preset in the Components window, Quick Picker and select Edit from the pen pop-up (right click).

Once the Preset is open in the Programmer you can make changes in the same way as you do when editing a Clip:

You can:

- Select fixtures in the Fixture Chooser window and add, remove or change settings using the palettes or encoders
- Select fixtures or Event bars in the Timeline window add, remove or change settings using the palettes or encoders.

To save changes to a Preset Select Save Clip from the Clip menu.

Tip: Once you are editing a Preset you switch between the Fixture view and Timeline view by either clicking on the Programmer button icons or selecting Timeline or Fixture chooser from the View menu.

Organising Components

At the top of the Components window there are several tabs entitled 'All, Intensity, Position, Colour etc'. The All tab always contains all the presets you have created. Presets will also be automatically added to any tab that corresponds to the parameters stored in the preset. For example if you create a Position preset it will appear in the All and Position tabs.

To add another tab, right-click in the area to the right of the existing tab and choose the Add tab option. This creates a new tab along the top of the Components window. To rename the tab, click on it and enter a title.

There are two mode buttons on the left side of the Components window. In Apply mode clicking on a preset or other component immediately selects and activates it. In Edit mode you can click on a component, to rename or move it, without it activating.

In Edit mode you can drag and drop components from the All tab to other tabs so you can arrange your components in a meaningful way. You can also drag items into different columns or positions.

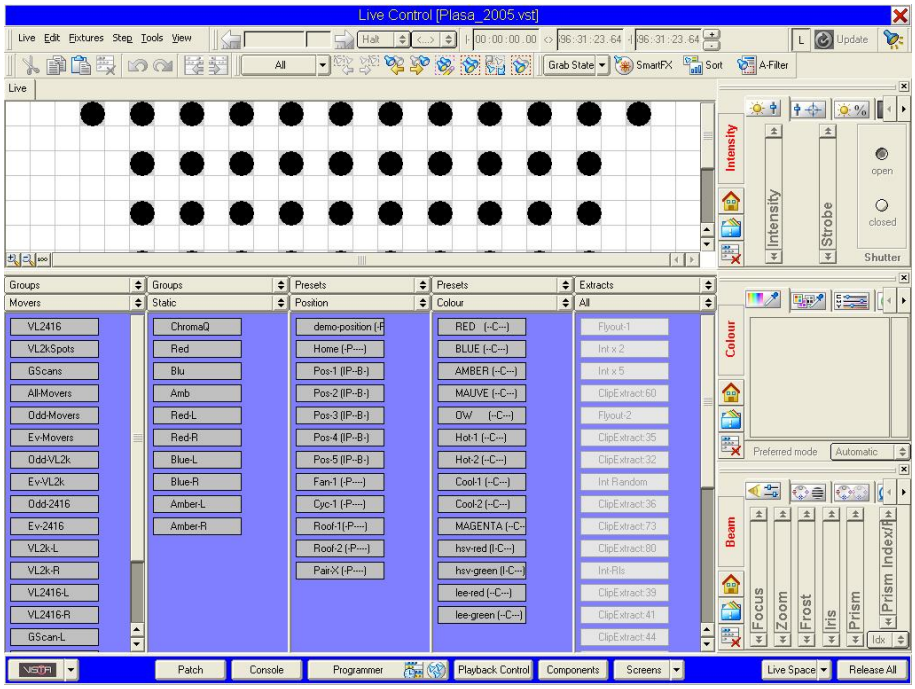
You use this same screen when working with extracts. See *Creating and applying extracts* for details.

Using the Programmer Quick Picker

The lower panel of the Programmer can be set to show either Groups or the Quick Picker. The Quick Picker provides an easy way to select any of the following items you've created:

- Presets
- Groups
- Extracts
- Clips.

To use the Quick Picker, switch to a Layout that has the Quick Picker option selected.



This screen has five columns whose contents you can set by choosing an option from the drop-down menu at the top of each column. Once you've chosen the type of information you want the column to display, you can also select what page you want to display within that column using the second drop-down menu.

Working with clips

Once you've set up your patch, arranged your fixtures, assigned them to groups, and created the presets you want, you're ready to create a *clip*.

This is where the Vista differs in a big way from traditional keypad-controlled lighting consoles, because instead of telling it what you want by entering strings of numbers, you do it all visually using the pen.

About the timeline

The Vista uses a 'timeline' concept that will be familiar to any of you who've seen any of the commonly used sound or video editing software available for computers. A group of events strung together along the timeline is called a *clip*.

The idea is simple: you create a series of lighting 'events' that occur in sequence when you hit the 'Play' button. With the Vista you can move back and forth through this piece of time and edit any aspect of the events that occur, in much the same way as you could drag a tape back and forth across the play head of an analog tape deck.

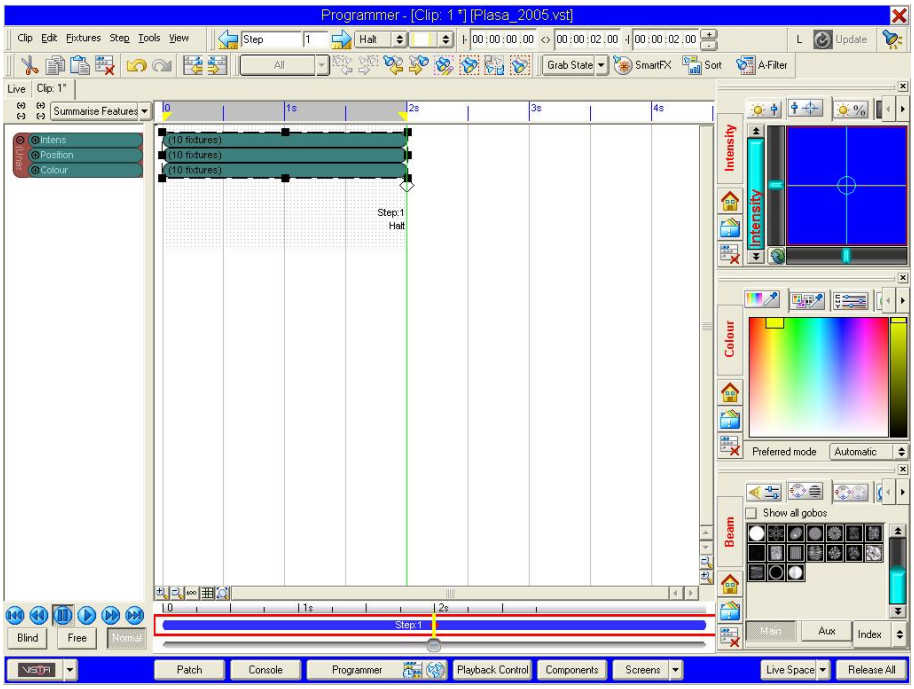
If you have the Programmer open and you are working in the Live tab you've probably already selected some lights, given them Intensity, Colour and so on. To create a Clip using this look as a starting point you do one of the following:

1. Choose the Export to New Clip option from the Live menu.

2. Hold down the Yellow (Ctrl on a PC) modifier button on the console and press the Select button on an empty playback.

If you want to just start a new clip from scratch you choose the New Blank Clip option from the Live menu.

. Vista creates a new Clip tab and displays the Timeline window:



This screen is where you create the events that make up the components of your lightshow.

Tip: Once you are editing a Clip you switch between the Fixture view and Timeline view by either clicking on the Programmer button icons or selecting Timeline or Fixture chooser from the View menu.

Tip: If you switch from a Clip tab to the Live tab any changes you make to Fixture setting (Intensity, Colour etc) will be output to stage but will not be stored to the Clip(s) you have open for edit.

Clip tabs

When you first open the Programmer there is just one Live tab above the timeline window. If you export to a clip or open a blank clip a new tab, labeled with the clip name, will be added.

You select the Clip you want to work on by clicking on the corresponding tab. When you select a Clip tab any fixture settings coming from the Live tab are turned off (made blind). This way it's easier to see what's in a Clip without setting from the Live tab being combined and shown on stage. If you prefer to not automatically turn off the Live tab output select user preferences from the Vista menu and set the Programmer, Auto-Blind Live tab preference to Off.

You can also turn on the Live tab output, while you working on a Clip by clicking on the [L] icon beside the Update icon.

Event bars

The horizontal bars represent events. These are the commands being sent to fixtures you've connected on your Patch screen and configured on the Fixture screen.

The event bars represent the activities of those fixtures over time. As you can see in this example, the bars go from the '0s' point on the timeline scale to the '2s' point. This means that these fixtures moving to a new setting over two seconds.

The settings you've applied to these fixtures on the palettes (e.g. intensity, colour and position) control the fixtures themselves. The timeline simply tells those fixtures to accept those commands, *and the event bar represents the length of time it will take those fixtures to get to the desired state.*

Once the fixtures get to that state they will stay like that until they receive another command telling them to do something else (e.g. switch off).

In short, by placing the event bars where you want them on the timeline you're giving commands to those fixtures that tell them how long a parameter will take to fade in. *The parameter is determined by the palettes; the timeline only controls when the fade starts and ends.*

Using the summary views

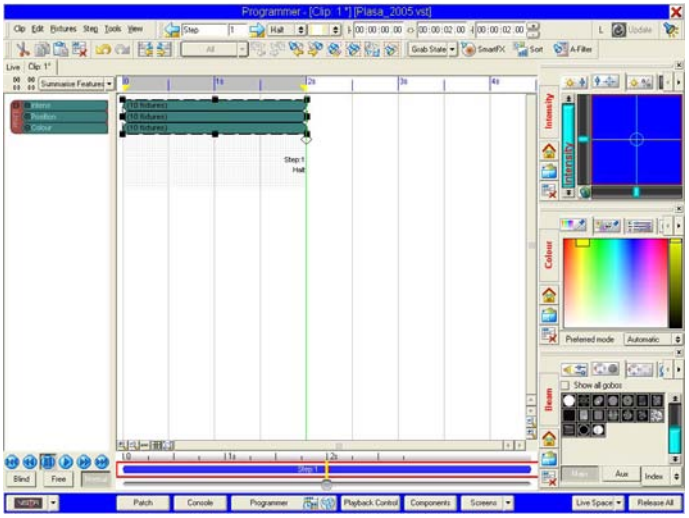
You can view the details of the fixtures in the clip in several ways:

- summarised by feature, i.e. intensity, position and colour
- summarised by fixture type
- all events
- filtered events – Intensity, Position, Colour etc

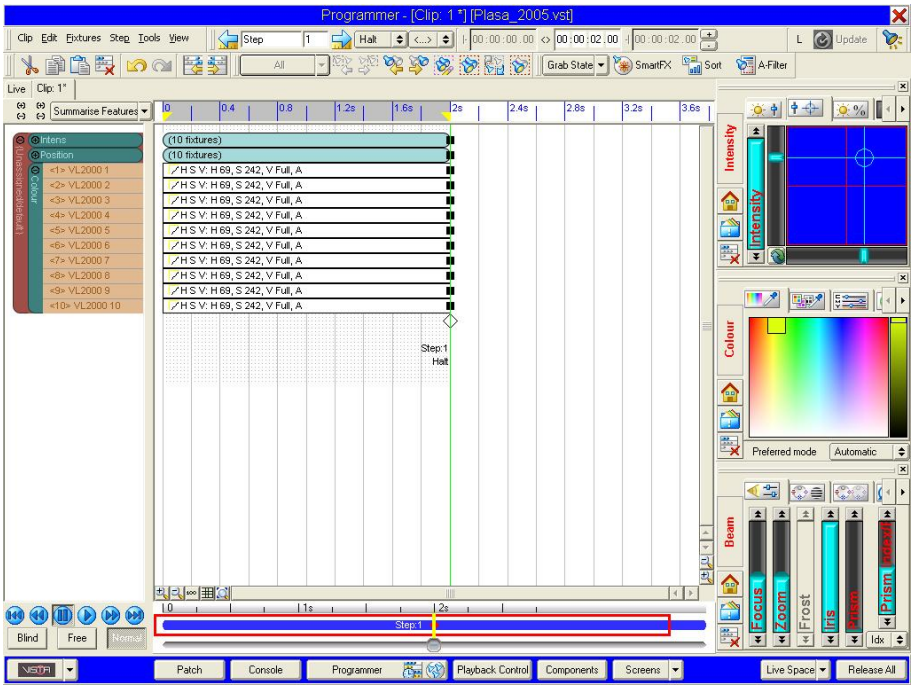
You choose these views from the Summary View drop-down menu in the top-left corner of the screen. You can also switch between the minimised/maximized setting of each summary view using the + and – buttons beside the drop-down menu.

Summary by feature

This view shows a set of fixtures by their three attributes:

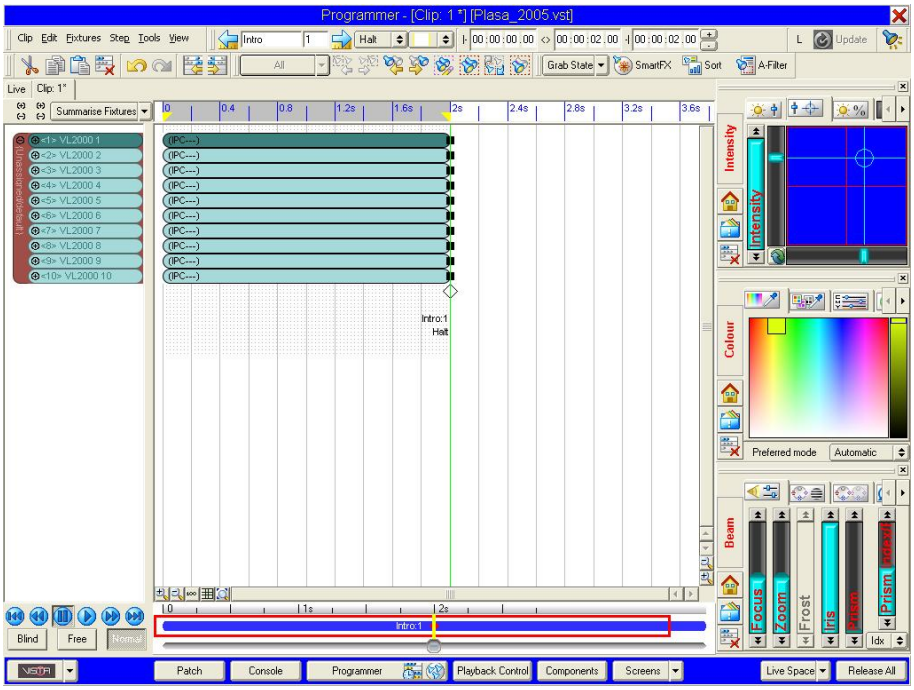


The view shows each bar minimised by default. To expand each attribute and see the details, click the '+' symbol beside the attribute name (e.g. 'colour'). Vista displays the details of that attribute:



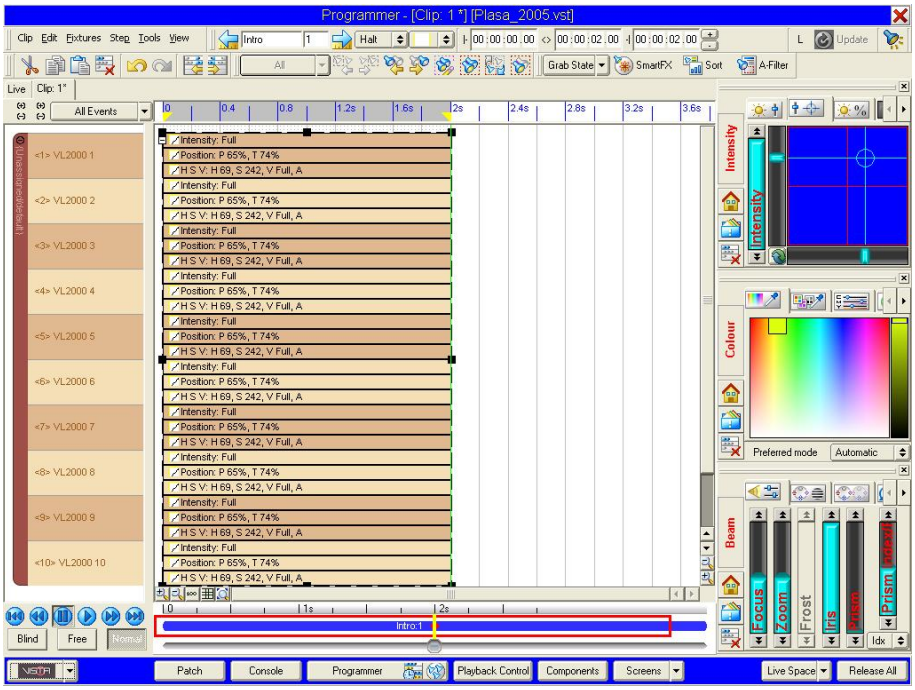
Summary by fixture type

The fixture type view shows the same information but sorted by fixture rather than attribute:



All Events

The All Events view shows all the details of each fixture:



This view is useful when you want to know exactly what you have in your clip, but it shows so much information that you will usually have to use the scroll bar on the right-hand side of the window to view it all.

Filtering the All Events view

As well as displaying All Events, you can also choose to filter out different classes of information on the timeline. To do this, choose an option from the list below the line in the View drop-down menu:

When you choose a filter, Vista displays only those types of events.

You can also create your own filters to show only those combinations of events you want to see. To create a filter:

1. Choose the 'Custom Filter' option from the menu. Vista displays the Define Filter window:

2. Click the 'New' button.

3. Check the buttons denoting the Classes or types of events you want Vista to display.

4. Type a name for the filter.

5. Click the Close button. Vista adds this filter to the drop-down filter list.

If you want to delete a filter, select it from the list on the Define Filter window and click the Delete button.

Playing and moving around a clip

At the bottom of the timeline screen there is a set of controls and an indicator bar that shows where you are in time within a clip:

The buttons on the left work just like the controls on a CD or DVD player:

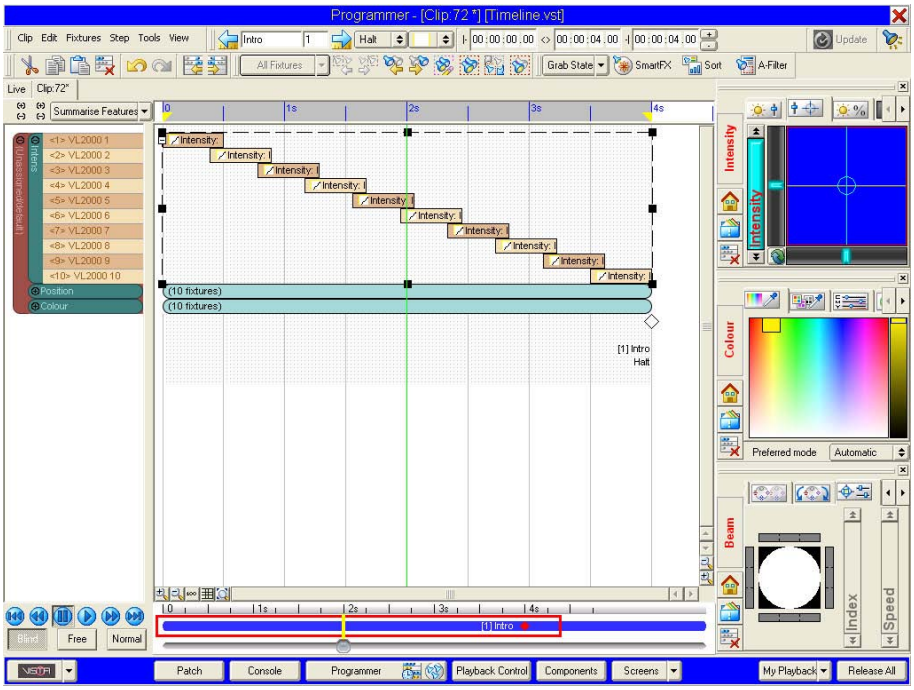
This button…	does this...
	Jumps to the start of the timeline.
	Steps backwards to the previous Step on the timeline.
	Pauses playback.
	Starts playback of the clip.
	Steps forwards to the next Step on the timeline.
	Jumps to the end of the timeline.

Blind	Cuts the DMX output so that you can make changes on the console without triggering any fixtures on the stage.
Free	Allows you to make changes to an event anywhere on the timeline without playback automatically jumping to that position. This mode is automatically selected if you open and edit a Clip that is currently active (being played back). Useful if you want to make changes to something that is about to be played back
Normal	In this mode the programmer output follows event selections. So if you open a Clip and click on an event in step 2 you'll see the Green playhead line jump to that point and the lights will change accordingly. This is the normal mode while programming.

The progress indicator

When you hit Play, the yellow line on the progress bar starts moving from left to right across the timeline. This line shows where you are up to in this clip. If you hit Pause, the line stops wherever it is on the timeline; if you hit Play it starts from the same spot.

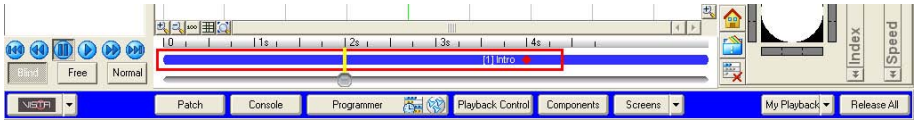
The yellow indicator line has a green line attached to it that runs across the event bars in the timeline itself to show you where you're up to. The green line is there so you can make precise timing adjustments:



Depending on the level of zoom you have selected, the green indicator bar may appear to be 'out of sync' with the yellow progress bar.

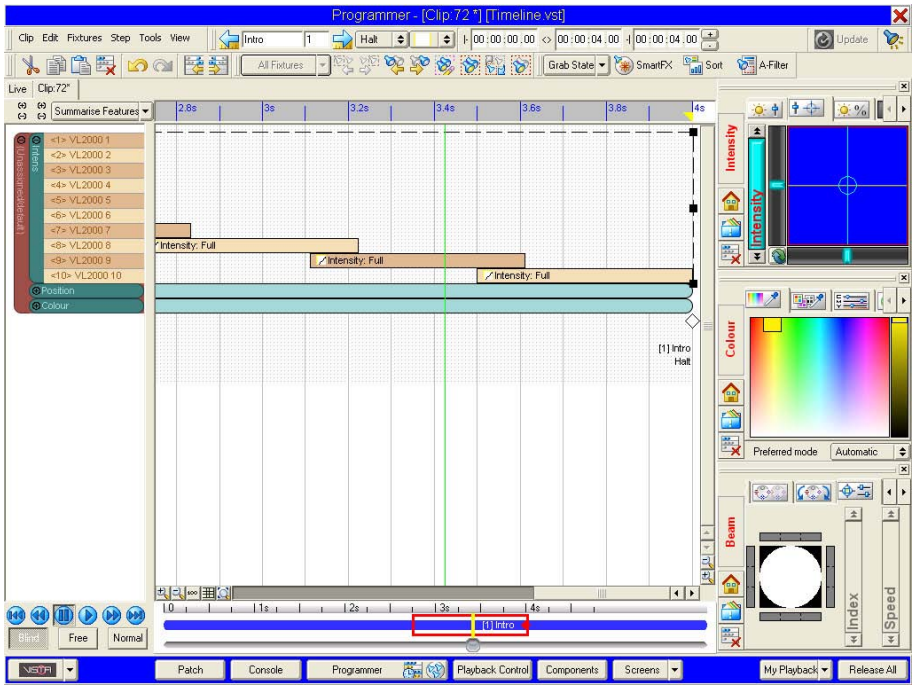
Zooming in and out

The red focus box beneath the timescale shows the current zoom level:



To focus on a particular section of the timeline, put the pen on this area and drag over the section you want.

Vista re-draws the red box to show the area you selected, and updates the information on the timeline to show that area:



You can also adjust the focus box using the icons on the horizontal scroll bar just above the progress indicator:

This icon…	does this…
	zooms in on the area selected by the focus box.
	zooms out, increasing the length of the focus box.
100	zooms to the normal scale - about 2 seconds visible.
	zooms to fit the selected objects.
	zooms to fit the entire clip in the window.

Tip: On the View menu you can also choose to fit to step, which re-seizes the screen to the width of the current step.

Creating clips

You can create any number of clips, each of which can consist of any number of individual lighting events. You can then combine these clips and 'play' them interactively to produce your overall lightshow.

For instance, you might create a clip that includes a peel off from the edges of the stage with all the fixtures changing colour as they peel and ending up focused on the centre of the stage. The whole thing might take five seconds from start to finish. You'd achieve this by creating a series of events, each of which handles one element of the overall effect.

When you trigger this clip from the console, the Vista plays through all of the events in the sequence you've arranged them in on the timeline. If you decide that part of the peel goes too quickly, you can go straight into the timeline and extend the time allocated to that event. All aspects of the clip can be changed, adjusted, manipulated on the timeline until you have it all the way you want it. Each time you make a change you can either play the clip again to see the result, or just drag the progress indicator bar from left to right to 'step' through the events.

Note that the timeline shows events as a passage of time, and the fixtures will only achieve their final state at the point represented by end of the event bar. For example, if your event is a fade-in from 0% to 100%, the fixtures will only reach 100% intensity at the end of the event bar.

Adding events to the timeline

To add one or more fixtures to the timeline:

1. Click the icon on the toolbar Programmer button to display the Fixtures window.

2. Choose the fixtures you want (or select a group of fixtures from the Group box).

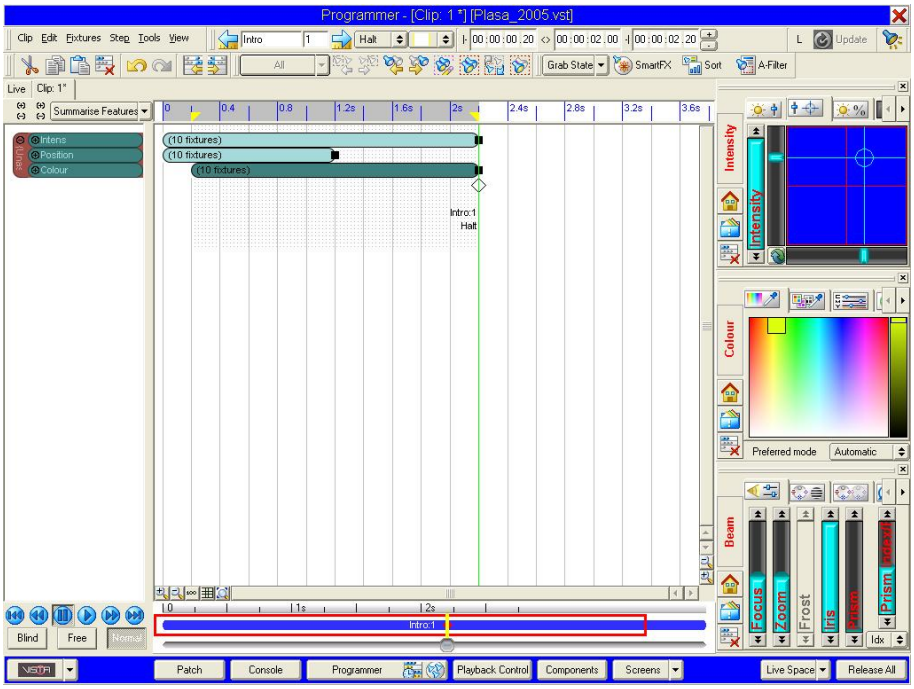
3. On the Intensity palette, turn up their intensity to a level above zero. You can also set any of the other attributes on the other palettes at this point if you like.

4. Tap the Timeline icon on the Programmer button on the toolbar at the bottom of the screen. Vista displays the timeline window with the fixtures you just chose selected.

These fixtures are now part of an event on the timeline.

Moving events around

Each event has three attributes: a start point, a duration and a finish point. The event bars on the timeline show you where each event starts and finishes and how long it will take to reach its end point:



To adjust the start or end point of an event, select the event and drag it along the timeline to the left or right. Note that the grid has an automatic 'snap-to' feature that makes it easy to align start and end points.

To change the duration of an event, select the black square on the right-hand end and drag it left to shorten the event, or right to lengthen it.

Note that in the example shown above three separate attributes of the event have different timings:

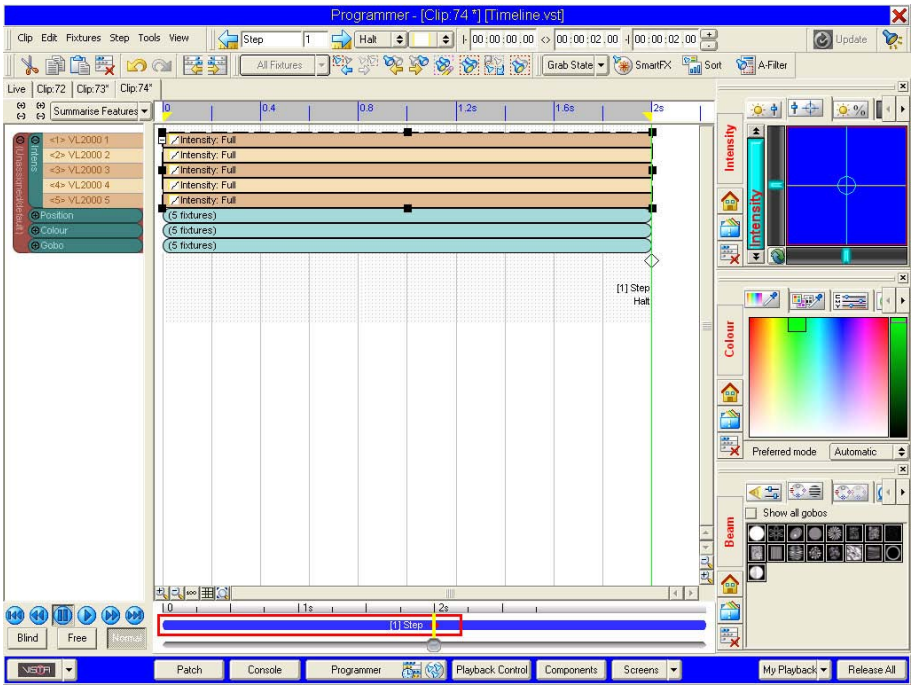
- the Intensity event starts at 0s and is complete at 2.2s
- the Position event starts at 0s and is complete by 1.2s
- the Iris event starts at 0.2s and is complete at 2.2s.

Using the modifiers to move events and step markers

Normally you can only move events within the bounds of the step they are in. To move an event across an Step marker hold down the Green (Alt on PC) modifier key. If you drag an event across the last step of a clip Vista will automatically create a new last step to accommodate the event. You can also reduce or increase the size of a step and scale all events within it by holding the Yellow (Ctrl on a PC) modifier while moving the Step marker.

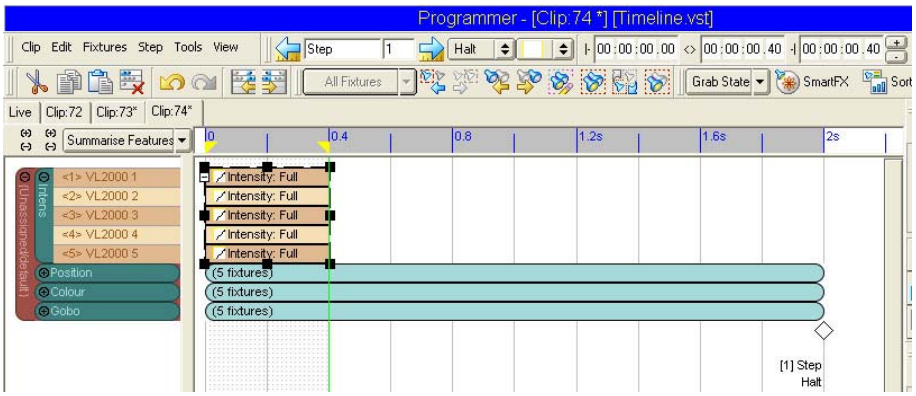
Working with selection handles

A quick and easy way to create dynamic lighting effects is to 'skew' the events on the timeline. When you select a group of events, Vista displays a dashed selection box around them with black squares on the corners and sides known as 'handles':

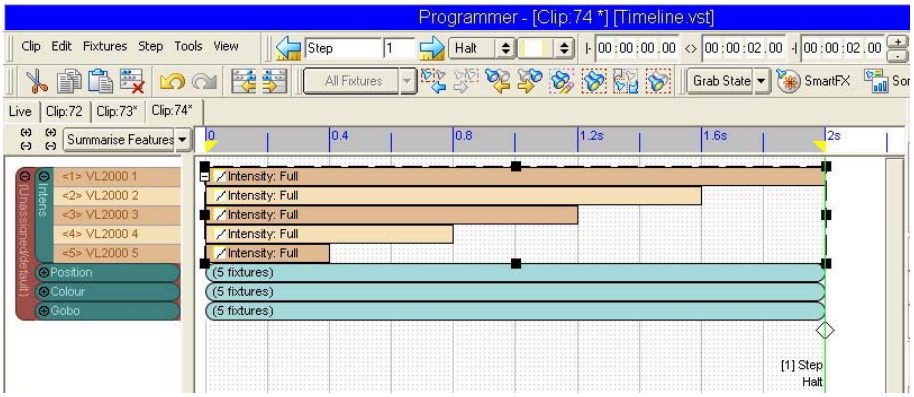


You use these handles to change the duration of the selected events. In this example, the Intensity events of a set of fixtures are selected. By selecting a handle and dragging it you can change the start or finish point of the selected events as shown below.

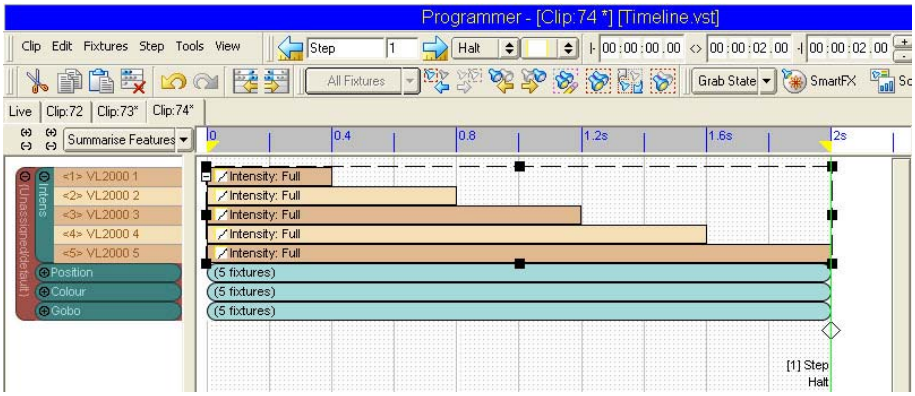
The fixtures will now fade in over 400ms:



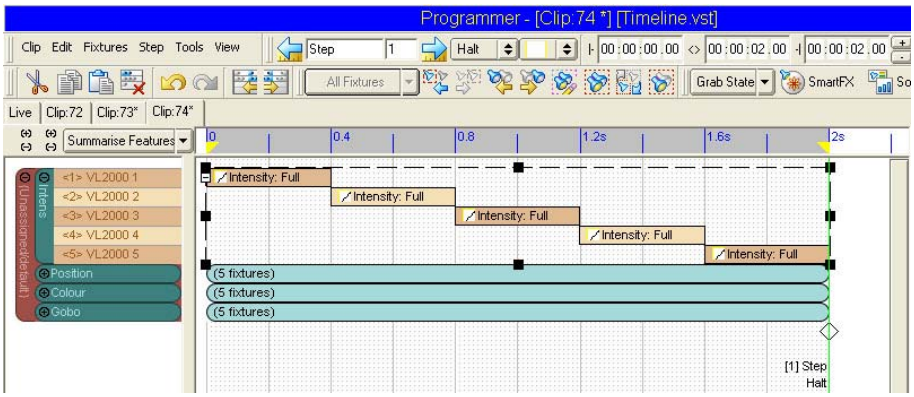
In the example below, we've selected the top right handle of the selection and dragged it right to step the end fade times over the 2 seconds. This has offset the end fade time so the first fixture takes the full 2 seconds to fade in and the last fixture takes the original time of 400 milliseconds:



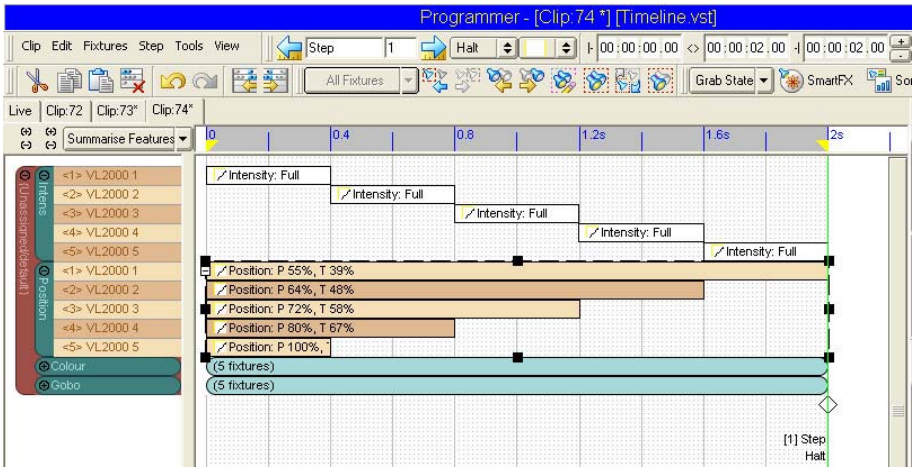
In the next example, we've selected the lower right handle of the selection and dragged it right to step the events over 2 seconds. This has offset the end fade time so the first fixture takes the original time of 400 milliseconds to fade in and the last fixture takes the full 2 seconds:



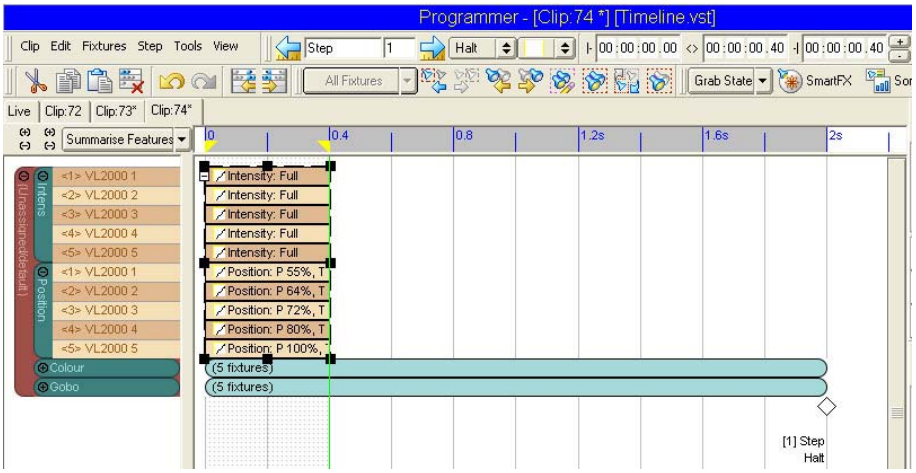
In the next example, we've selected the middle handle on the lower edge of the selection and dragged it right to step the events over 2 seconds, offsetting start and end fade times while retaining the 400 millisecond fade duration:



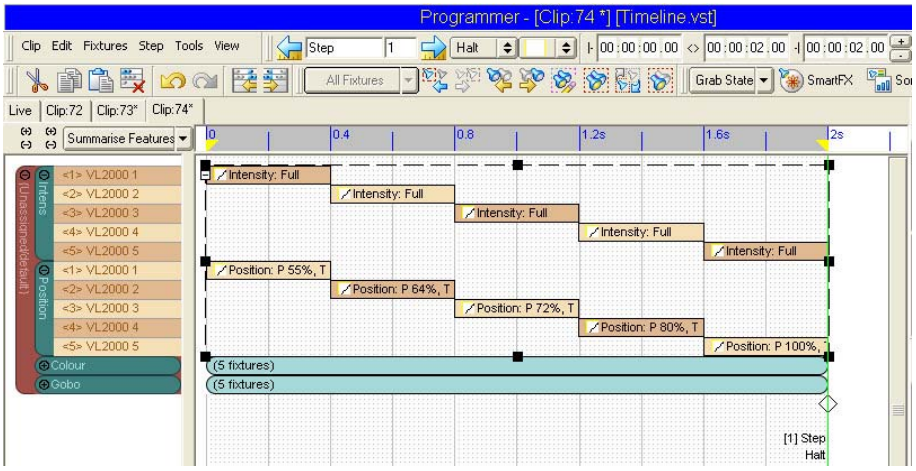
If we now open up the Position event summary bar, we can select and skew the position events too, completely separately from the intensity events:



This is an easy way to create the same effects over more than one parameter (intensity and position for example), as you can change both simultaneously. Starting with intensity and position events at a fade time of 400 milliseconds, we drag the middle handle on the lower edge to the right:

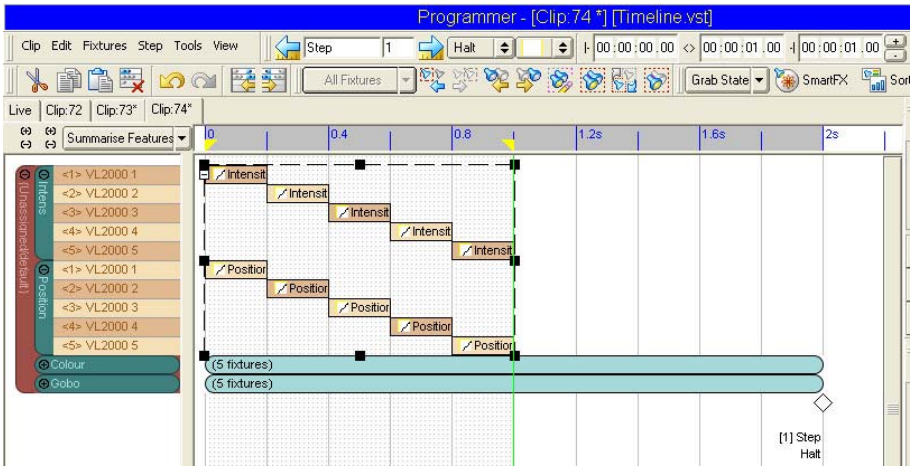


This creates the following effect:



The Intensity and Position events have the same offset start and fade times as well as duration in one easy action.

If we wanted that same effect but over 1 second and not 2 seconds, we select the middle handle on the right-hand side and drag it to the left until its duration is 1 second:

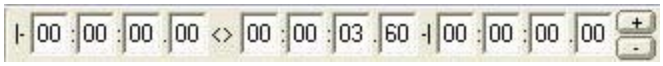


Using the selection handles in this way you can utterly transform the attributes of the selected events with just a few quick strokes of the pen. You can also adjust any of the intensity, colour and beam attributes at any time while adjusting the timeline events.

Making precise timing adjustments

If you want to set the start and end times and durations of events to a precise point on the timeline you can either zoom right in and line them up visually, or enter the actual time values.

On the right end of the toolbar of the timeline screen, there are three sets of four numeric fields:



The first set shows the starting point of the selected event; the middle set defines the duration; and the third defines the end point. You can either type values directly into the se fields or use the + and – buttons on the end to adjust the values.

You'll notice that when you drag events around the timeline Vista updates these fields automatically.

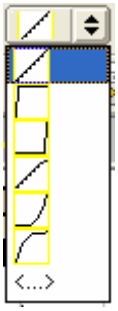
Aligning start and end points

You can also align the start and end times of selected events. To do this, select the events and click the alignment icons on the toolbar:

These two icons respectively align the start and end times of the selected events.

Setting the fade path

Vista provides a set of pre-defined fade path shapes so you can quickly set how an event will progress. Click the drop-down box on the toolbar beside the timing fields to display the fade path options:



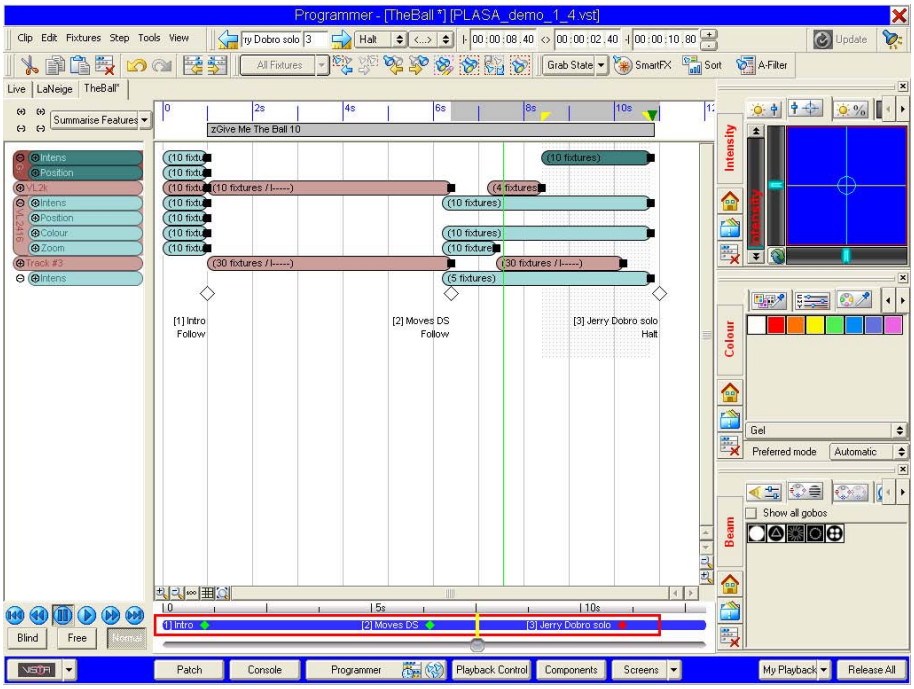
The shapes in this menu depict the fade paths you can choose:

This shape…	**means this…**
	Automatic. Uses the default path for the event type. i.e. Intensity events fade, colour / gobo wheels snap
	Standard linear fade, going to the final state over the duration of the event.
	Snap at start - Go to state very quickly.
	Snap at end- Go to state at the end of the event.
	Delay, then slide up to the state.
	Reach the final state approximately halfway through the event.
	Displayed when you have multiple fixtures with different fade paths selected.

Tip: Instead of making an event very short, just set it to snap at start

Working with steps

Events on the timeline are contained within a 'step', and each clip can have any number of steps. The steps occur in sequence along the timeline and the end of each step is marked with a diamond shape, as shown in this example:



The diamond marker represents the end of the step and is used to determine what happens when playback reaches this point..

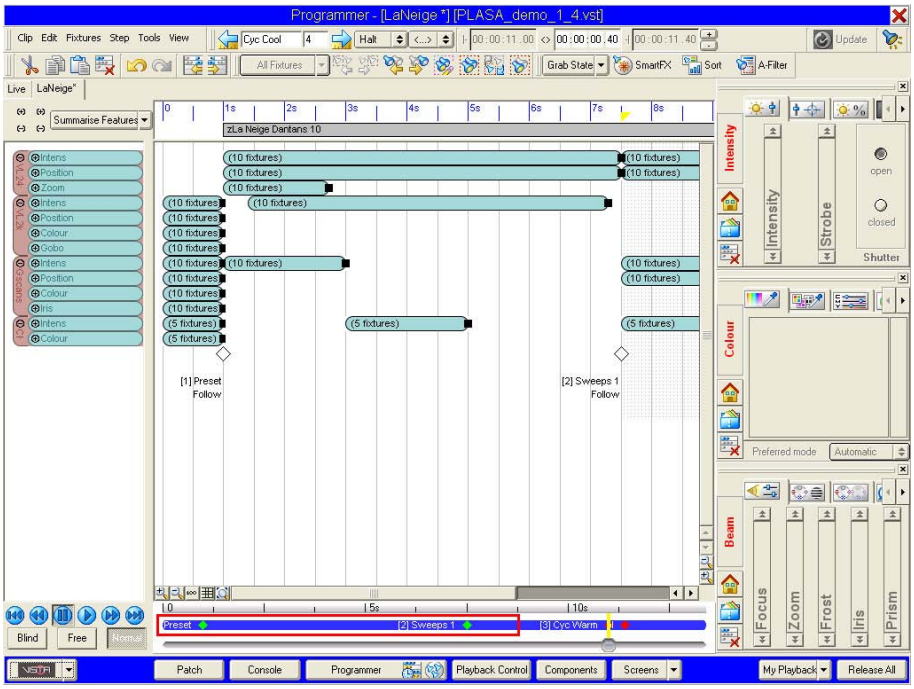
Vista displays green diamonds marking the end points of each step in the progress bar at the bottom of the screen so you can quickly see the main points of your clip.

Tip: Normally a step marker can only be moved to the right – to lengthen the step. This does not change the length of any events in the step. However you can use the coloured modifier buttons to change this action as follows:

Holding this modifier	**When moving a Step marker does this…**
Yellow (Ctrl)	Events to the left and right of the Step marker are moved with the marker
Green (Alt)	The Step marker can be moved freely

Setting the end of step instructions

Each step lasts for a duration that is nominally defined by the start point of the first event in it and the end point of the last event. In this example we can see a label on the timeline 'Sweeps 1 - Follow':

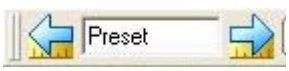


Each step needs an instruction telling it what to do when it reaches its end point. To set this you can either click on the diamond marker, or select the event and choose an option from the drop-down menu beside the Step field:

There are two options:

This option…	**does this…**
Follow	When Vista reaches the end of this step it automatically goes straight on to the next step in the clip
Halt	When Vista reaches the end of this step it stops playing

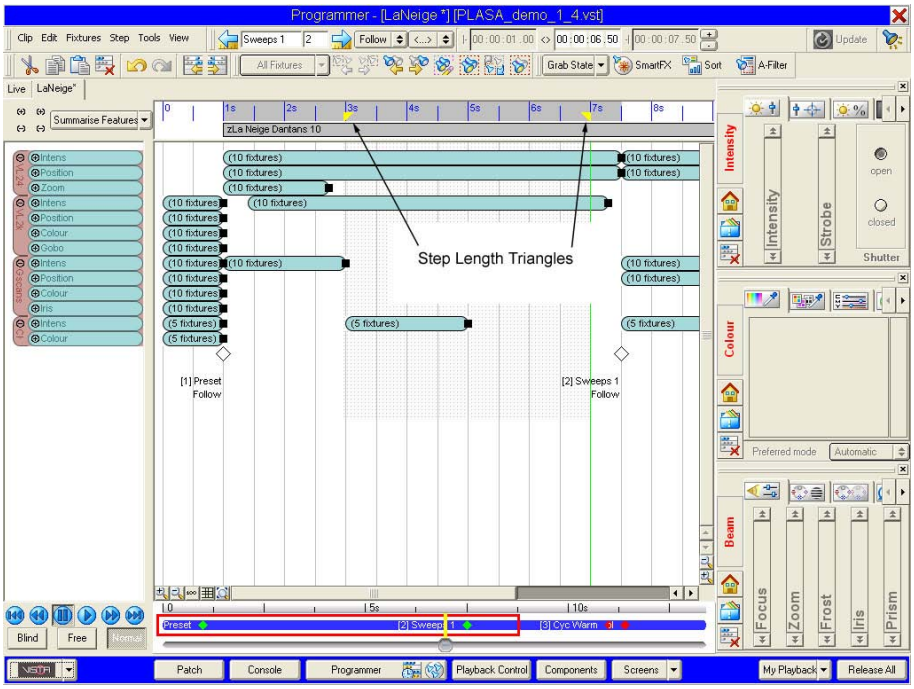
You can focus in on the Steps in a clip one at a time using the left and right arrow keys on the toolbar:



You can add a new step, before the first step or after the last step by selecting the first step and clicking the Left arrow icon or selecting the last step and clicking the right arrow icon. You can also name new steps or rename existing steps in this field.

Pre-determining event lengths

You can pre-determine the starting point, duration and end point of an event using the two yellow Event Length triangles on the time 'ruler' at the top of the timeline:



Tap and drag these triangles to define the start and end points of a step. When you next add events to the timeline Vista automatically places the events between these two points in time.

Splitting steps

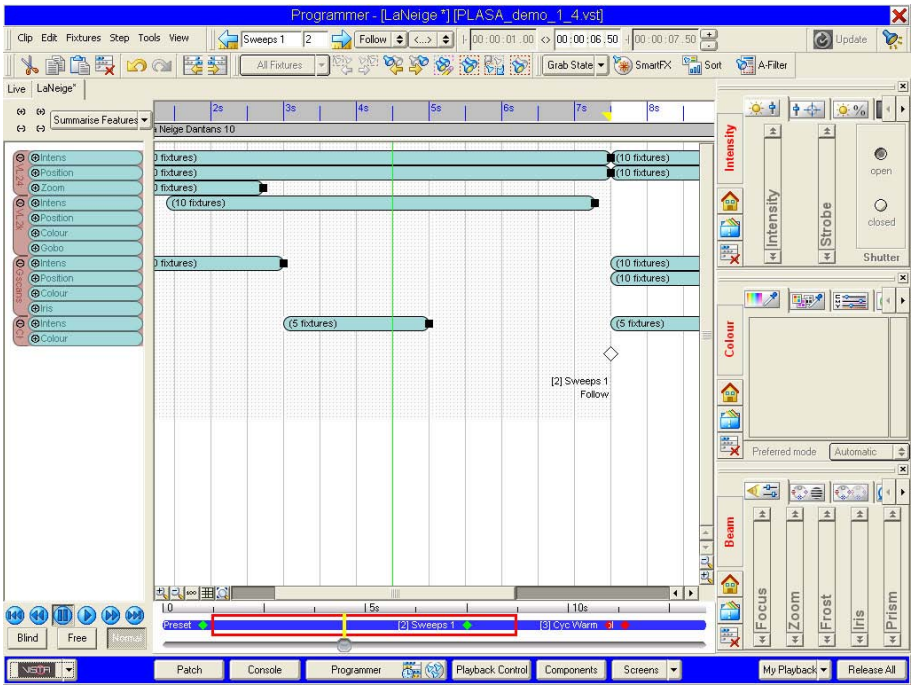
You can split a step into two steps to give you more detailed control of the events within it. To split a step, click on the timescale at the top of the timeline at the point where you want to split the step, then choose 'Split at cursor' option from the Step menu. Or

Position the green Playhead line at the point where you want to split the step, then choose 'Split at Playhead' option from the Step menu

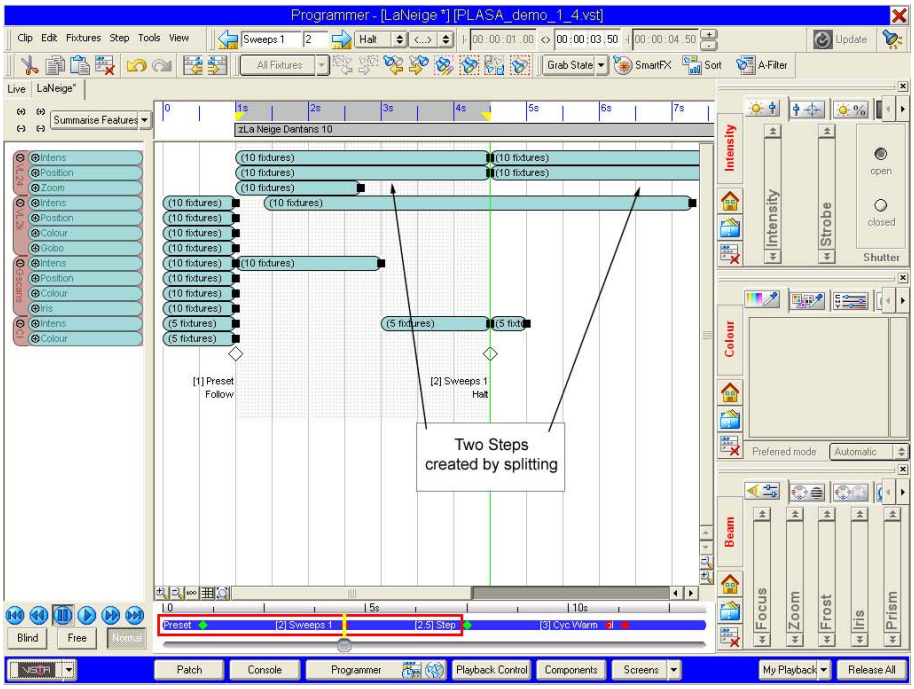
Vista splits the step into two at that point.

This example shows the ‘before’ and ‘after’ effect of using this function:

Before splitting



After splitting



Adding markers to the timeline

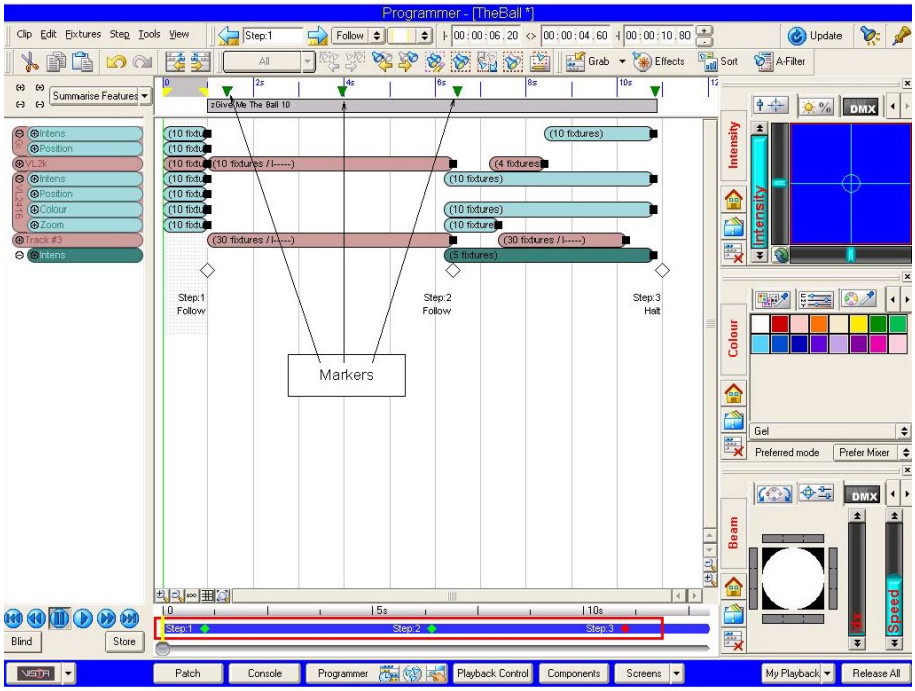
You can denote significant points on the timeline with markers and use them as moveable ‘snap-to’ points. This is useful when working with SMPTE timecode because the markers are independent of the standard ‘snap-to’ points of the timeline grid, so you can place them anywhere you like within time.

To add a marker:

1. Tap on the timescale 'ruler' at the top of the timeline and right-click to display the pop-up menu.

2. Choose the 'Add marker @ cursor option'. Vista adds a green arrow at that point.

This example shows three markers on the timescale:



Removing Markers

To remove one or more markers from the timeline, select the step that contains them, then choose the Remove markers option from the Tools menu (also available by right-clicking in the timeline).

Creating and applying extracts

Extracts are like programming templates and can contain any of the attributes you define on the palettes: intensity, colour, beam, position, and so on. Additionally they store the timing associated with the events.

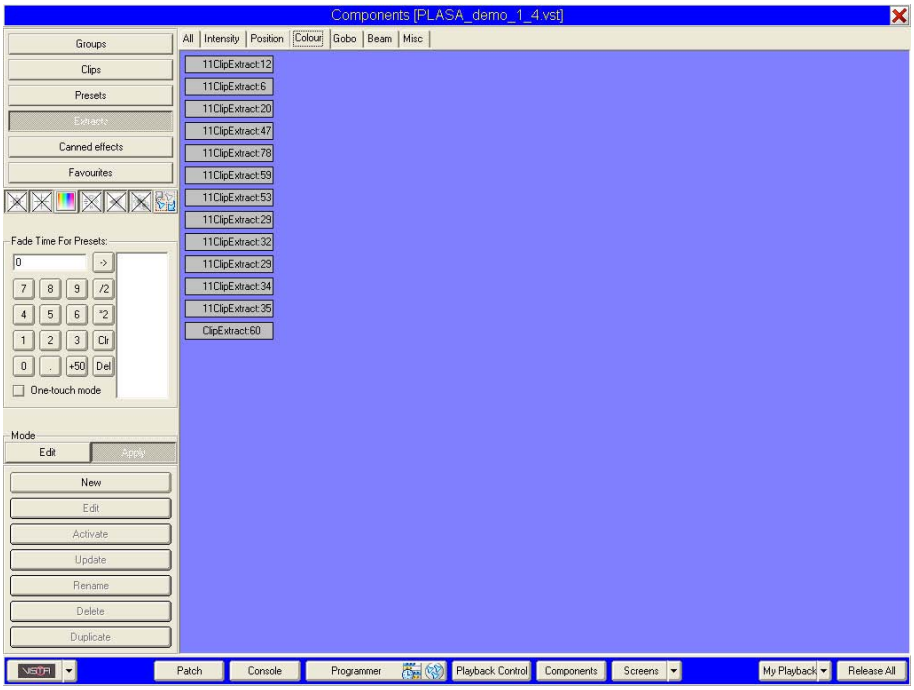
An extract is a section of a clip (or range of events) that you can save and re-apply in other clips. By re-using existing material to build new clips you can save yourself a lot of time re-creating your favourite lighting effects.

Creating extracts

To create an extract:

1. Select the part of the clip or events on the timeline that you want to extract.

2. Click the Components button on the relevant palette. Then click the Extracts button. Vista displays the Components Extracts screen with the filters set to filter out all the other attributes of the events you selected:



In this example we clicked the Components icon on the Colour palette, so Vista has filtered out all the other attributes. The masks that are on show as 'crossed-out' icons below the buttons in the top-left of the screen. If you want to include other attributes in this extract, click the relevant mask buttons to switch the masks off.

3. Click the New button. Vista stores the extract with a default name

4. Right-click on the new extract icon and choose the Rename option from the pop-up menu. Type a meaningful name for the extract.

Applying extracts

To apply an extract:

1. Select one or more fixtures in the Programmer Fixture window.

2. Click the Components button on the relevant palette.

3. Click on the Extracts button in the Components window

4. Find the extract you want and click on it to select it.

5. Set the mask buttons so that the attribute you want are applied. Any attribute that is masked, even if it is part of the extract, will not be applied.

6. Click the Close button.

Arranging extracts

You'll probably end up with a lot of extracts of all different kinds fairly quickly. The 'All' tab always show every extract you've created, whatever type it is. To enable you to find the one you want easily Vista automatically sorts your extracts into a number of separate tabs for Intensity extracts, Position extracts etc. You can also add other tabs to enable you to arrange extracts in any way you choose.

To do this:

1. Click the Components buttons on one of the palettes to open the Components window.

2. Click on the Extracts button in the Components window

3. Right-click on or to the right of the tab labeled 'All' at the top of the window, and choose the 'Add Page' option. Vista adds a new tab labelled 'Page #'.

4. Double-click the tab name to highlight it and type in a more meaningful name that describes the types of extracts you're going to keep in this folder, (e.g. 'Flyouts').

5. Select the extracts you want to move to this folder, then drag and drop them onto the new tab. Vista copies them from the 'All presets' folder into this folder. Now when you click on the new tab, you'll see your extracts in there.

Editing extracts

You can use the Programmer to add, remove or change information stored in an extract, there are two ways to open an extract for editing:

- In the Components window you can select the Preset and click on the Edit button , or
- you can select the Preset in the Components window, Quick Picker and select Edit from the pen pop-up (right click).

Once the Extract is open in the Programmer you can make changes in the same way as you do when editing a Clip:

You can:

- Select fixtures in the Fixture Chooser window and add, remove or change settings using the palettes or encoders
- Select fixtures or Event bars in the Timeline window add, remove or change settings using the palettes or encoders.

To save changes to an extract Select Save Clip from the Clip menu.

Tip: Once you are editing an extract you switch between the Fixture view and Timeline view by either clicking on the Programmer button icons or selecting Timeline or Fixture chooser from the View menu.

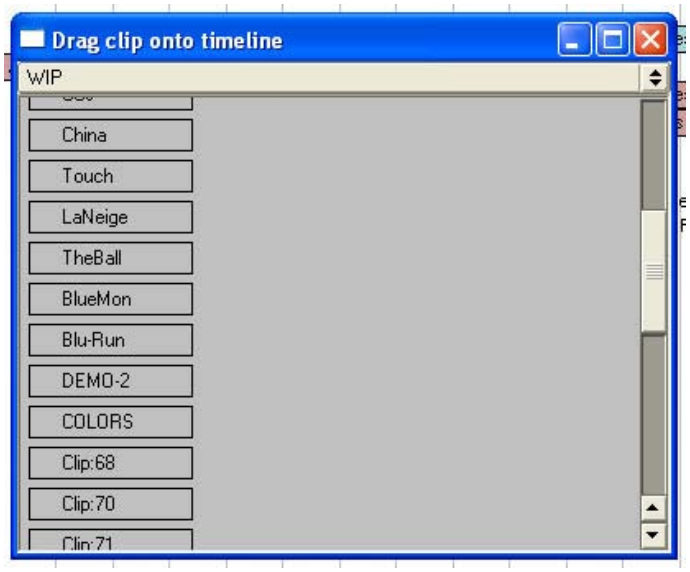
Using clips within clips

Once you've created a bunch of great clips you'll probably want to re-use these too. On the timeline screen you can load a clip into another clip so that they run simultaneously. This is useful when you want one series of events to take place while something else is happening.

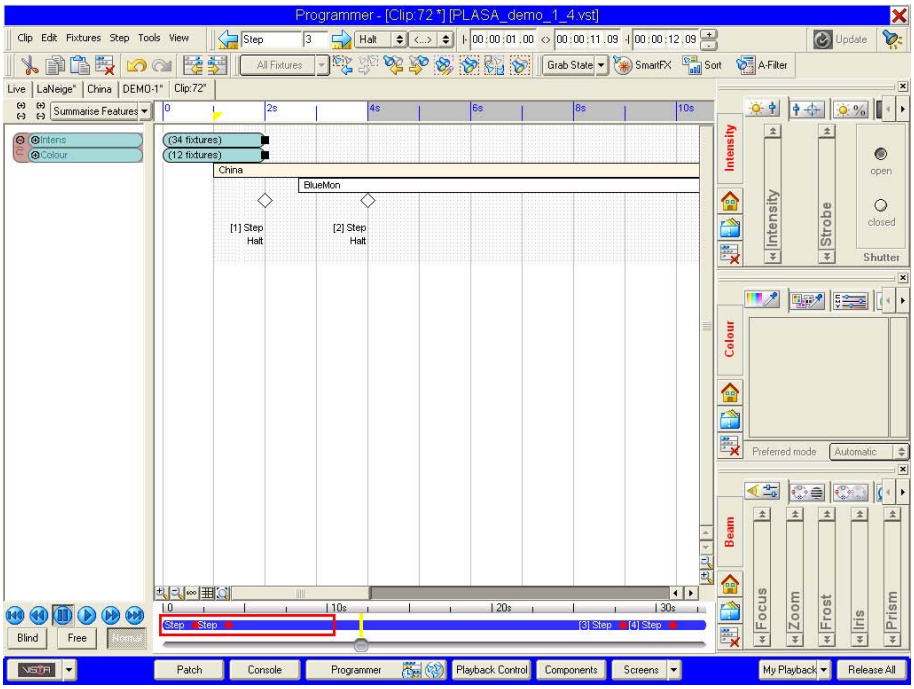
For example, you might have created a clip of a sunrise effect that takes place over five minutes, and while that is playing you want to place various spots in different parts of the stage. A simple way to do this is to load the sunrise clip into another clip, and it will start from wherever you place it on the timeline.

To do this:

1. From the Tools menu, choose the Insert Clip option. Vista displays the clip Insert Clip window:



Click on the clip you want, then 'drag and drop' it onto the timeline. This screen shows an example of the timeline after we've dropped two clips onto it:



2. Arrange the clips where you want them on the timeline, then click the 'X' in the top-right corner of the clip Picker window to close it. Note that you can resize and move the clip Picker window around by clicking on the blue bar at the top of the window. You can also 'dock' it by dragging it to the side of the screen.

Grabbing the console output

Sometimes you'll want to capture whatever output the console is producing at a given moment and bring it into a clip. This is called 'grabbing', and it's particularly useful as a way of building a Clip from a look you've built on stage.

To grab the console output at any time when one or more clips are playing:

1. Open a new Clip or a Clip you want to add to.

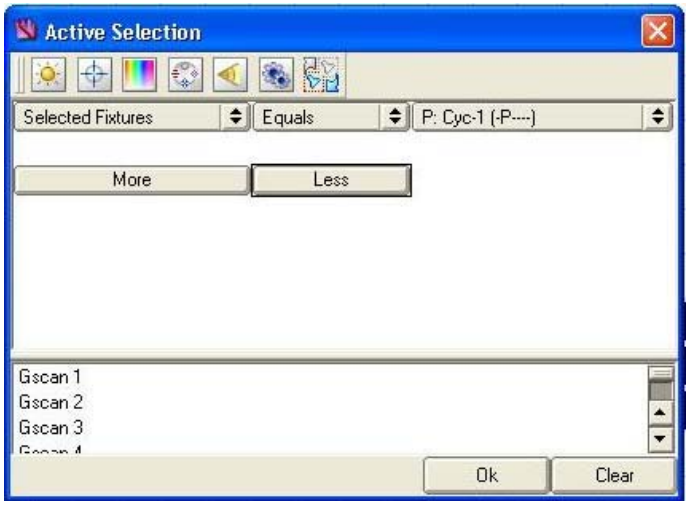
2. In the Fixtures view, select the fixtures you want to grab. If you don't select any fixtures the Vista assumes and selects All fixtures

3. Switch to the Timeline view and click the Grab icon on the toolbar:

4. Choose the Grab Active or Grab Full option from the pop-up menu. Grab Active grabs whatever attributes are playing right now (e.g. intensity, colour), and pastes them into the timeline as a new event. Grab Full captures the full state of the fixtures (e.g if there is No colour event a Colour White event will be created). If you've made any changes to the events since you loaded the clips, Vista grabs these changes too.

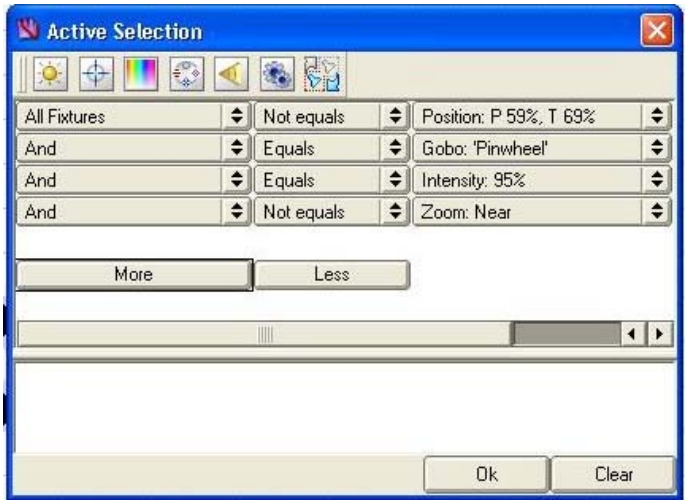
Selecting events by attribute

If you want to select all the events that have a similar attribute (e.g. all the instructions to use red), choose the Active Filter option from the Fixtures menu on the Programmer screen. Vista displays the Active Filter screen:



Use the three drop-down lists and the filter buttons to choose the attributes you want, then click OK to select all the fixtures with those attributes. To add more lines so you can narrow the definition of the fixtures you want to select, click the More button.

Each time you click it, Vista adds a row of fields so you can define multiple attributes, as in this example:



Here we are selecting all fixtures that have the following attributes:

- a position other than Pan 59% and Tilt 69%
- a “Pinwheel” gobo
- intensity at 95%
- not zoomed near.

Inserting a ‘Mark’ step

Sometimes you will want fixtures to move to a position while their intensities are set to zero. You could do this with an event, but you can also do it using the Insert Mark Step option on the Tools menu in the Programmer window.

To use this option, switch to the Summarise by Fixture view, select the fixtures you want to move, and choose the Insert Mark Step option. Vista displays this screen:

This screen shows the selected fixtures and a Result telling you whether it can move those fixtures in the black and if not, the reason why.

You can try to move the fixtures in three ways:

This option…	**does this…**
Previous Step Action	Sets the end of step action for the Previous step. This defaults to unchanged.
Step Action	Sets the end of step action for the new Mark step.
Step Duration	Sets the end of step action for the new Mark step.
Step Duration	Creates a new step before the current step to put the move in black into (i.e. forces the move by creating a place for it to happen).

Name	Sets the name for the new step that will be created.

The transition time field determines the amount of time in milliseconds that you think the fixture will need to make the transition in the black. This setting determines the messages telling you whether the fixture can make the transition or not.

This field defaults to a time that would allow any fixture to make the move and you should only change it if so you have some idea of the speed of the fixtures, or if you know they don't have far to move.

Using the Live tab to update Clips during playback

When you make changes, in the Live tab, while a clip is being played back, you can make those changes apply to the presets from which you constructed the clip, or just make the changes to the clip itself.

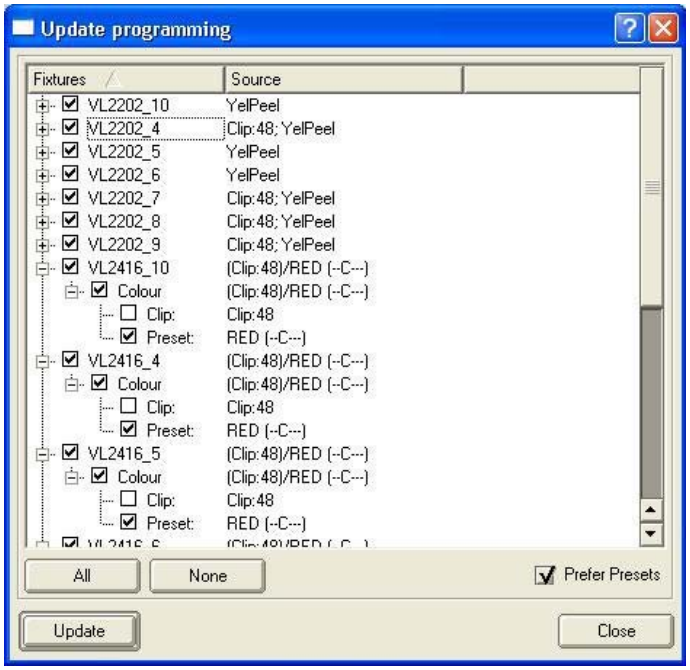
To do this:

1. While a clip is playing, go to the Live tab on the Programmer Fixture window and select the fixtures you want to change.

2. Make the adjustments you want using the palettes.

3. Click the Update icon , or choose the Update Live Playbacks option from the clip menu.

4. Vista displays the Update Programming window:



This screen determines which fixtures in the clip or preset your changes will apply to. By default, Vista selects the preset for each fixture.

5. To apply the changes to all the presets, click Update. If you want to apply the changes just to this particular clip rather than to the presets from which it is constructed, un-check the Prefer Presets box. To de-select all the fixtures so you can choose specific one, click the None button.

6. When you've defined how you want to apply your changes, click the Continue button to return to the Fixtures screen.

Updating Clips in the programmer

When you make changes, in the Live tab, you can store those changes to any Clip that is open, in it's own tab, in the programmer.

To do this:

1. Open the Programmer window and select the Live tab.

2. Select the fixtures you want to change and make the adjustments you want using the palettes.

3. Select Open Clip from the Live menu and select the Clip you want to update. When the Clip opens the output from the Live tab is turned off.

Tip: If you don't want to automatically turn off the Live tab when you switch to a Clip tab you can change the "Auto Blind Live tab" preference in the Vista menu – User preferences.

4. Once the Clip is open select the Step you want to update. You can also insert a new step if required.

5. Click the [L] Live icon (beside the Update icon), or choose the Update Live Playbacks option from the clip menu.

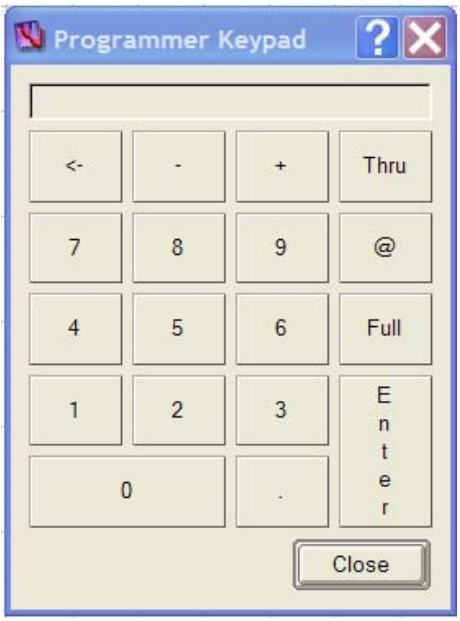
6. Click the Update button

7. Vista updates the Clip with the settings from the Live tab:

8. If you are finished making changes Save and Close the Clip

Using the keypad in the programmer window

In some situations it is convenient to select fixtures and set intensities using a keypad. To use the Vista keypad choose the Control panels > Show virtual keypad from the View menu:



Selecting fixtures with the virtual keypad

Use the keypad to select Fixture by their ID number(s). For example:

- 1 + 5 + 10 Enter
  selects fixtures 1, 5 and 10
- 1>10 - 4>6 Enter
  selects fixtures 1, 2, 3, 7, 8, 9 and 10

Selecting fixtures and setting levels with the virtual keypad

You can also set levels with the keypad. For example:

- 1 > 10 @ 50 Enter
  selects fixtures 1 through 10 and sets them to 50%
- 1 > 10 @ Full
  selects fixtures 1 through 10 and sets them to 100%
- 1 > @ 1 Enter
  selects all fixtures and sets them to 10%

Using effects

There are several ways to use effects. You can:

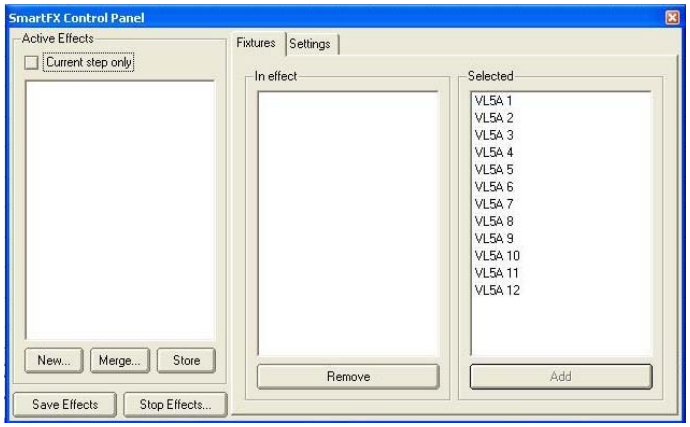
- apply a single stored ('canned') effect
- swing between two of your presets
- create your own effects from scratch
- modify existing effects.

Applying a single stored (canned) effect

To apply an effect:

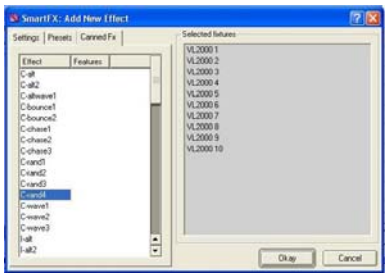
1. In the Programmer Fixture window, select the fixtures you want.

2. Click the SmartFX button on the toolbar. Vista displays the SmartFXs window:



3. Click the New button to display the Add New Effect window:

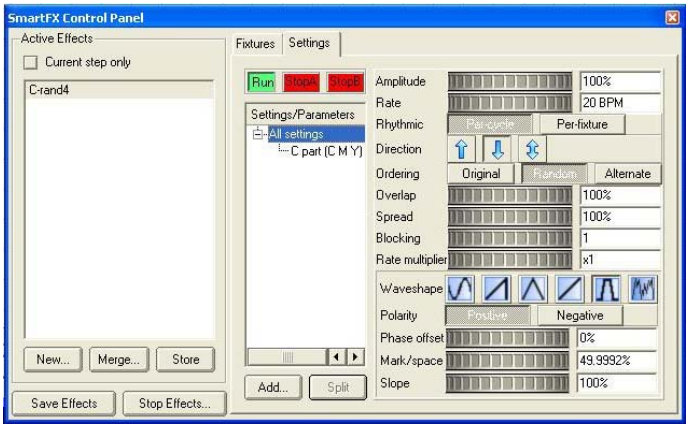
4. Click the Stored (Canned) FX tab. Vista displays the list of available stored (canned) effects:



The first few letters of each effect title tells you what parameters are in this effect (e.g. I-Intensity, P-Position, C-Colour, etc).

5. To apply an effect, click on the effect you want and click the OK button. Vista displays the Smart Effects window showing the effect you've chosen:

6. To add a second effect that is synchronized with the first one, click the Settings tab to display the SmartFX Control Panel:



7. Click the Add button, choose another effect and click OK. Vista adds this effect to the list in the Settings/Parameters box.

8. To adjust the parameters of an effect, click on it in the Settings/Parameters box and use the controls to adjust it (see *Effect controls*).

9. To see the effect, click the green Run button. To stop if, click the red Stop button – a swing effect has two stop buttons.

Stored (Canned) effects that modulate or swing

Stored (Canned) effects are pre-set to either swing or modulate. Swinging means the fixtures move between two sets of attributes determined by the effect (e.g. moving from to left to right). Effects that are preset to modulate will apply their own varying attributes about a particular setting (e.g. creating a circle around a position).

Swinging between two of your own presets

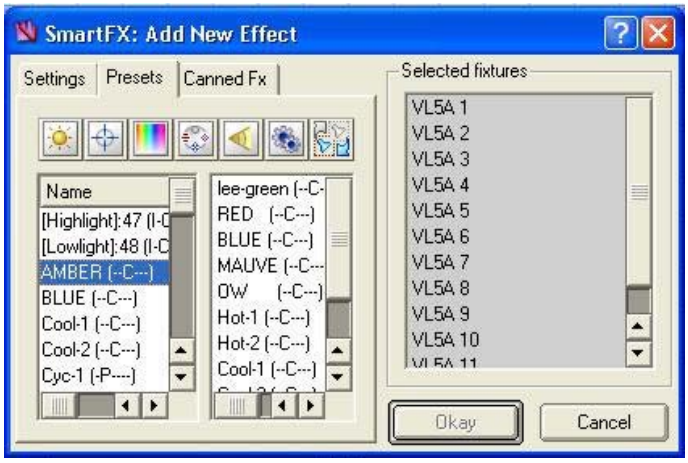
Once you've created a couple of presets (see *Creating presets*) you can use the Effects window to swing between them.

To swing between two presets:

1. In the Programmer Fixture window, select the fixtures you want.

2. Click the SmartFX button on the toolbar. Vista displays the Smart Effects window:

3. Click the New button to display the Add New Effect window and click the Presets tab:



You can use the buttons along the top of the window to filter out the various types of preset (e.g. to display only the colour presets). To do this click the 'X' button to turn off all of them, then click the icon for the preset type you want to display.

4. Select a preset from the list on the left (the 'A' preset), then choose one from the list on the right (the 'B' preset) and click OK to start swinging between the two presets. You can then adjust the settings of the overall effect using the controls (e.g. speed it up, spread it across, etc). See *Effect controls* for details.

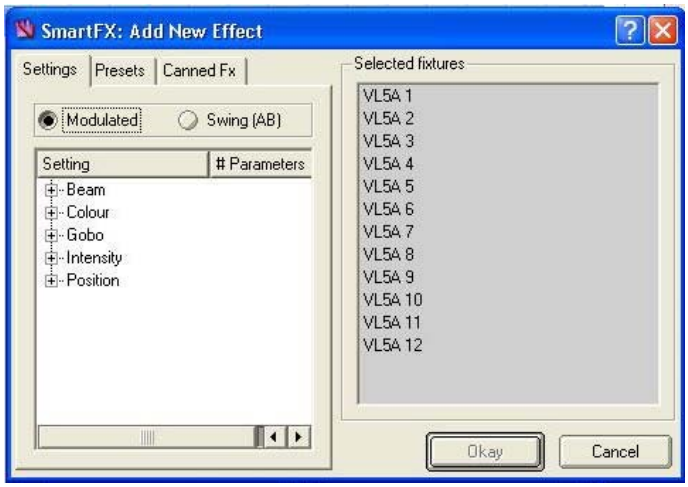
Creating an effect from scratch

To create your own effect:

1. In the Programmer Fixture window, select the fixtures you want.

2. Click the SmartFX button on the toolbar. Vista displays the Smart Effects window.

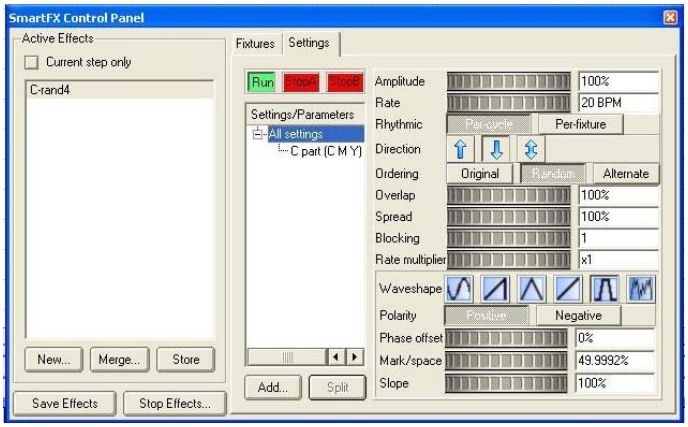
3. Click the New button to display the Add New Effect window and click the Settings tab:



4. Choose the parameter you want to put an effect on (e.g. position) and click either the Modulated or Swinging button at the top of the window to determine the type of effect you are going to create.

   'Swing' creates an effect that transitions from one setting to another, while 'Modulate' varies the attributes of one setting (e.g. creating a circle or figure of eight around a single position).

5. Click OK display the selected parameter in the Settings/Parameters box:



6. Click on the parameter and adjust the controls to apply the effects you want (see *Effect controls*).

Making your effect swing

If you chose the 'Swing' button in the Settings tab, you have to define the end points of the effect (i.e. where it starts and where it finishes).

In this case, when you click OK, Vista adds 'Stop A' and 'Stop B' buttons at the top of the Settings/Parameters box:

To define the two end points:

1. Click the 'Stop A' button.

2. Use either the palettes or the controls to define a setting.

3. Click the 'Stop B' button and define its settings in the same way.

4. Click the 'Run' button to start the effect swinging.

Saving your effect

To save an effect you've created, click the Save Effects Button. Vista displays a small window asking for a name for the effect. Type a name for the effect and hit the Enter key on the keyboard. Vista adds you effect to the list of stored (canned) effects. Next time you click the Stored (Canned) FX tab on the Effects window, your effect will be in the list.

Modifying effects

To add or change the features of an effect, click the Add button below the Settings/Parameters box and choose the additional effect you want from the list. Vista adds it to the list of attributes in the Settings/Parameters box. You can then select any of these and adjust them using the controls (see *Effect controls*).

Splitting out effects

Once you've added several effects you may want to take or more of them out and make them separate effects in their own right.

To do this, click on the effect you want in the list in the Settings/Parameters box and click the Split button. Vista removes that effect from the Settings/Parameters box and adds it to the effects list on the left-hand side of the screen. It's now a separate effect that applies to the same set of fixtures.

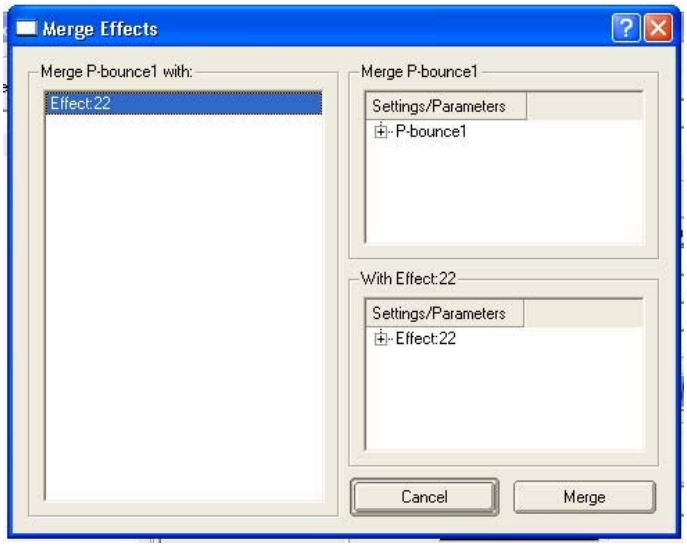
Merging effects

Once you have two or more effects applied to a clip you can merge them into one. You might want to do this to combine a set of 'building block' effects and save them all as one effect.

Note that you can only merge effects within a single step.

To merge two or more effects together:

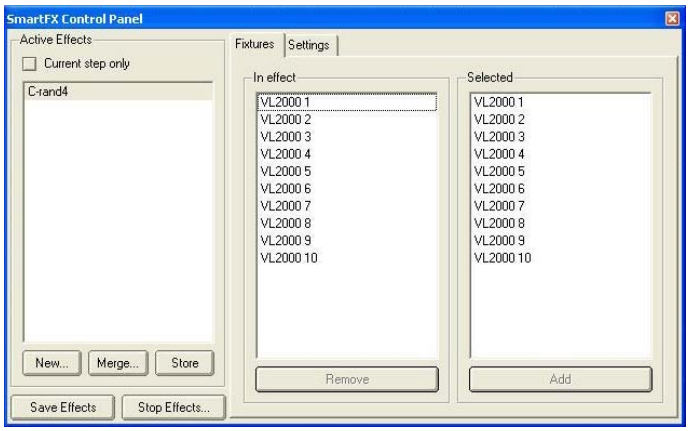
1. In the Effects list, choose an effect you want to merge and click the Merge… button. Vista displays the Merge Effect window:



2. From the list in the Merge Effects window, choose the effect you want to merge your selected effect with, then click the Merge button. Vista combines the first effect you selected with the second.

Reviewing effects

The FX Control Panel has three panes: the effects list, active effects and selected fixtures:



The effects list displays all the effects you've applied to the entire clip. When you click on an effect in this list, Vista displays the fixtures it is applied to in the Active Effects list in the centre. The Selected Fixtures list on the right always shows whatever fixtures are currently selected in the Fixtures window.

To see which effects are applied to a particular step of a clip, check the 'Current step only' checkbox at the top of the Effects window. With this box checked, Vista displays only the effects that are applied to the current step of the clip. This is a quick way to work out what effects are happening at any given moment in a clip.

Effect controls

The SmartFX Control Panel contains the following controls:

This option…	**does this…**
Amplitude	For modulated SmartFX each setting parameter can be assigned its own values for Amplitude. For swing effects then there is only a single set of parameter controls (since there is only one waveform being generated): • For modulated - affects how much of the waveform is added to the relevant parameter. • For swing - affects the extent of the swing centred between the A & B endpoints, i.e. only a value of 100% would reach the endpoints.

Rate	This is the base rate at which the effect runs, expressed in beats-per-minute (BPM). The resultant rate achieved over the targeted fixtures depends on the *Rhythmic* control (below).
Rhythmic	This control affects whether the *Rate* is based on cycles-per-minute or fixtures-per-minute: • Per-cycle - if the effect is an intensity chase at a *Rate* of 20BPM *Per-cycle*, then the whole sequence will repeat 20 times each minute. • Per-fixture - if the chase is at a *Rate* of 80BPM *Per-fixture*, then the chase will cover 80 fixtures each minute. The loop time of a *Per-fixture* effect varies with the quantity of fixtures used, and is slower with more fixtures. Note that the fixture-to-fixture rate (e.g. a flash rate) will be constant no matter now many fixtures are used.
Direction	Mainly useful for chasing effects, this controls whether fixtures are sequenced in ascending (down), ascending (up) or both directions (bounce).
Ordering	Controls how fixtures are ordered when calculating waveforms and can either be or: • Original - fixtures are treated in selection order. • Random -the order of fixtures is re-shuffled each time the effect loops • Alternate - fixtures are in original order but alternating fixtures have inverted modulation – e.g. can can
Overlap	This is one of the fundamental SmartFX controls and affects how much each fixture overlaps the next when executing the effect: • Overlap = 0% Each fixture executes the effect sequentially • Overlap = 100%) Each fixture executes the effect simultaneously. This control works in conjunction with Spread to achieve synchronized chases & wave effects (see below).

Spread	SmartFX dynamically calculate a waveform offset value for each fixture depending upon this control: • Spread = 0% - all fixtures have a uniform offset • Spread = 100% each fixture has a unique offset ranging from 0% to 100%. • Normally this control would be left at 100% if the Overlap control is anything except 100%, otherwise there will be periods where all fixtures will appear to be 'at rest'. See below for a simple SmartFX tutorial using Overlap & Spread..
Blocking	This control affects how the set of fixtures is grouped together. Normally this would be left at 1 to indicate that each fixture is calculated individually. This control either represents a fixed number of fixtures that are ganged together or it represents a proportion of the total fixtures for the block size. For example: • when set to 2 - pairs of fixtures will be ganged together (whatever the total number of fixtures used). • when set to 25% - the total number of fixtures is divided into 4 groups (each block is 25% of the total count) – for a set of 12 fixtures then they'd be ganged in threes.
Rate Multiplier	To maintain synchronization between the parameters of a modulated effect, instead of specifying independent *Rate* values you can scale each parameters rate as a multiple of the base rate. If you need to achieve slower rates then set the base rate to lower value (e.g. ½ or ¼ of required rate) then set each parameter's rate multiplier accordingly.

Waveshape	There are 6 basic waveshapes available that can be combined with the *Polarity* and *Phase offset* controls to achieve many different waveforms. The 6 basic waveshapes are: • **Sinusoidal** Use a *Phase offset* of 0% to get an actual sine wave or a *Phase offset* of 25% to achieve a cosine wave. • **Ramp** The output value linearly ramps up to the end value then snaps back down to the start value. • **Pyramid** The output value linearly ramps from the start value to the end value and back down to the start value. • **Ramp-remain** Similar to *Ramp*, but the output value remains at the end value until the waveshape restarts (i.e. only effective for non-overlapped SmartFX). • **Rhomboid** This is a special-case waveshape that involves a couple of extra waveshape controls: *Mark/space ratio* and *Slope*, explained below. • **Ballyhoo** This is an extra-special waveshape that is dedicated to the production of ballyhoo position effects. It is designed to achieve a pseudo-random movement on two parameters while similarly ensuring that at least one of the parameters moves by a significant degree (since purely random waveforms can easily move between two very similar values and not appear to move).

There are two common controls that affect all waveshapes:

This option…	**does this…**
Polarity	Affects whether the resultant waveform is normal or inverted (e.g. a normal *Ramp* would ramp up & an inverted *Ramp* would ramp down).

Phase Offset	This, in effect, 'rolls' the waveshape within its own window – e.g. a 0% Phase offset for a sinsusoidal waveshape would start and end at the midpoint while a 25% Phase offset would have the sinusoid start & end at the high point.

The following two controls only affect the Rhomboid waveshape and can vary it between a rhombus, a square and a pyramid:

This option…	**does this…**
Mark/Space Rhomboid waveshape only	This controls how much of the waveshape is spent on (high) versus off (low). Useful for strobe chases to affect the duration of each flash.
Slope Rhomboid waveshape only	This controls the slope between the off and on levels. A *slope* of 0% results in a snap change between low & high and a *slope* of 100% results in a linear change. Note that the duration of the linear change is limited by the *mark/space ratio*: if this ratio is not 50% then the linear slope is shortened (e.g. above 50% means more time is spend on than off and there will always be a resting period at the high level).

SmartFX Quick-start tutorials

Setup a small show with at least 10 fixtures and configure the Fixture or Tracking window so you can see all 10 fixtures at the same time.

Using Stored (Canned) Effects

1. Edit a new clip in the programmer.
2. Select the 10 fixtures open up the SmartFX Control Panel (SmartFX toolbutton)
3. Click New to open the SmartFX: Add New Effect dialog. The selected fixtures are shown on the right hand side (to confirm what will be affected).
4. Click the Stored (Canned) FX tab to display the library of stored (canned) effects.
5. Select an effect from the list and hit OK to insert the effect.
6. Repeat 3-6 to add effects for different features or to replace effects on existing features.

Stopping an Effect

To stop an effect and have the fixtures revert to their original or default values for the parameters that were running the effect you do this:

1. Edit the clip in the programmer.
2. Select the Step where you want to stop the effect, or create a new step
3. Select the fixtures and open up the SmartFX Control Panel (SmartFX toolbutton)
4. Click the Stop Effects button. The Select Effects to Stop window opens.
5. Select the Effect(s) you want to stop. The selected fixtures are shown on the right hand side (to confirm what will be affected).
6. Click the Stop button. Stop RTFX events will be added to the timeline.

SmartFX programming & playback fundamentals

Edit a new clip in the programmer

Select the 10 fixtures and open the SmartFX Control Panel (SmartFX toolbutton)

1. Click New to open the Add New Effect dialog.
2. Click the Settings tab and ensure the Modulated button is selected
3. Open the Intensity branch to show the Intensity and Shutter items
4. Select the Intensity item and hit OK to close the dialog. You should now see all fixtures' intensity modulating but only reaching about 25%.
5. Using the programmer's intensity panel set the intensity to 50%. You should now see the fixtures modulating between 25% and 75%.
6. Using the SmartFX Control Panel, click the Settings tab to view the SmartFX controls. If the controls appear disabled then click the new 'I-modulate' effect that can be seen in the Active Effects pane on the left – the controls should now be enabled and should show the currently set control values.
7. Set the Amplitude to 100% to get the fixtures modulating between 0% & 100% intensity.
8. Step forward and set the new step to 20s duration (using either the duration controls on the toolbar or by dragging the step point out to 22s).
9. Ensure the same fixtures are still selected and then use the intensity control panel to track forward the programming into this step (hit the 50% intensity button on the percentage tab).

10. A new effect will appear in the Active Effects pane of the SmartFX dialog – click to select it on the controls.

11. Slowly move the Spread control up to 100% whilst observing the output (Tracking View/Wysiwyg etc.). Note how the effect changes to a wave pattern.

12. Leave the Spread control at 100% and then very slowly move the Overlap control back from 100% observing the output (NB this control is very sensitive so move slowly down to 90%). Note how the wave gets shorter – when the control is down around 60% only a couple of adjacent fixtures are on whilst all the remaining fixtures are 'resting'.

13. Move the Spread control back to 100% and leave Overlap at 100%.

14. Step forward to a new step and again set it's duration to 20s. Click the 50% button to track the programming forward again (ensure fixtures are still selected). Click to select the new effect at the bottom of the Active Effects list.

15. Set Overlap to 0% and note that the effect is now chasing from one fixture to the next.

16. Click the middle effect in the Active Effects list. The timeline should automatically select the relevant events in the middle step.

17. Set the Rate to 40BPM.

18. Press the SmartFX toolbutton to close the SmartFX control panel.

19. Use the transport controls to rewind the playhead to the start of the clip and play the first step to output the initial effect.

20. Press play to play through the second step and observe the output. The effect will smoothly transition from a 'flat' effect in to a wave and will gradually double in speed.

21. Play through the last step and observe how the wave duration gradually decreases together with the overall rate, until a single fixture chase results at the end.

Selecting and sorting fixtures in the timeline

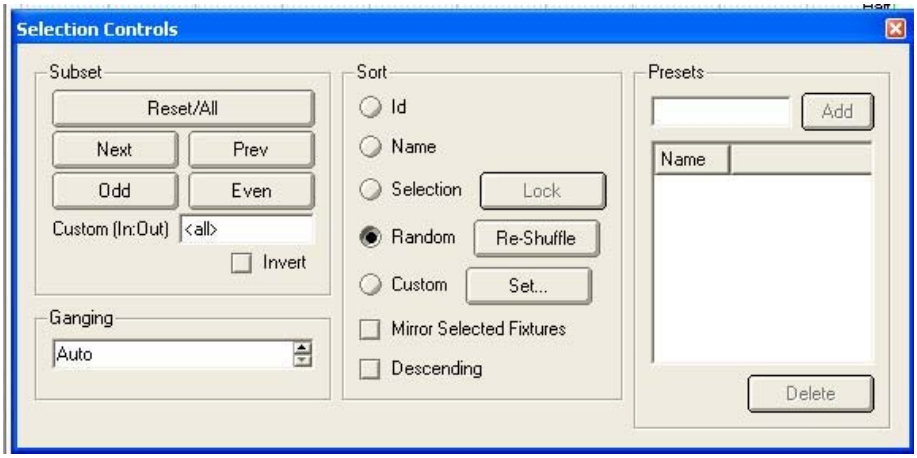
You'll often want to select particular fixtures and sort them in a certain way to achieve an effect (such as bringing lights up on each side of the stage and successively across the stage towards the centre). To make these sorts of effects you may need to sort or 'gang' your fixtures.

To select and sort fixtures:

1. Select the fixtures you want in the Programmer Fixture window. Note that if you want to sort them in particular order other than the obvious ones (such as beginning and end), choose them in that order now.

2. Press the Sort

icon on the Timeline screen to open the Sort window:



Selecting subsets of fixtures

When you drag the pen across the Fixture window and select a bunch of fixtures, you get a fairly broad selection. If you want to be more specific you can use the Subset pane of the Selection Control window to select a specific set of fixtures.

The subset selection controls are:

This button…	**does this…**
Next	Selects the next fixture in the list. If you have all the fixtures selected, this de-selects all but the first one.
Prev	Steps back in the reverse direction, selecting the previous fixture in the list.
Odd	Selects all the odd numbered fixtures (i.e. 1, 3, 5 etc). If you click it a second time it selects 2-on-2 -off (i.e. 1&2, then 5&6, 9&10). If you click it a third time it selects 4-on-4-off (i.e. 1-4, then 9-12, and so on).
Even	Selects all the even numbered fixtures (i.e. 2, 4, 6 etc). If you click it a second time it selects 2-on-2-off (i.e. 3&4, then 7&8, 12&13). If you click it a third time it selects 4-on-4-off (i.e. 5-8, then 13-16, and so on).
Reset/All	Reverts the subset to the original selection all the fixtures you chose in the Fixture window)

Custom (In/Out)	In this field you can define how many are selected and how many are not. The first number is the number of fixtures *in* the selection, and the second is the number that are skipped. For instance, if you set this to 1:2, Vista selects fixture 1, de-selects 2&3, selects fixture 4, skips 5&6, selects 7, skips 8&9, selects 10 and so on (i.e. a setting of 1:2 selects fixtures 1, 4, 7 and 10, while a setting of 3:4 selects fixtures 1, 2 &3, skips 4, 5, 6 and 7, and selects 8, 9 and 10 and so on).
Ganging	Groups a number of fixtures together so that any action you take applies to them as a group, rather than individual fixtures. For example, it determines the number of fixtures selected when you use the other subset buttons. For instance, with Ganging set to 2, every time you click Next, it selects pairs of fixtures. It also affects the way changes you make on the timeline apply to the fixtures – any change made to ganged fixtures applies to the whole gang, not just one fixture. This is useful to do things like make fixtures come on in pairs.
Invert	This button inverts whatever you have selected. For instance if you have a custom selection of 5:2 it selects 2:5; if you have odd fixtures selected it selects evens.

Sorting fixtures

You can sort fixtures in a number of ways. To do this, select the fixtures then click the Sort. Vista displays the Sort window:

This option…	**sorts the fixtures in…**
ID	ID number order.
Name	alphabetical order.
Selection	the order in which you selected them on the Fixtures screen.
Random	random order. The Re-Shuffle button re-sorts the fixtures into another random order.

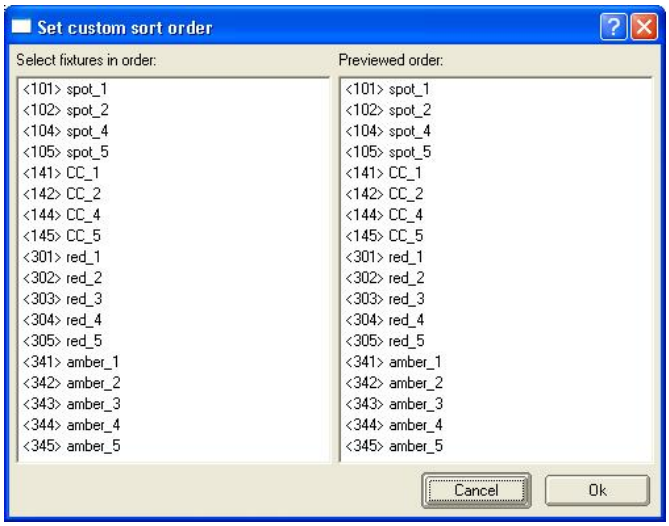
Custom	in any order you define. Clicking the Lock button defines the current selection as the Custom selection. Click the Set... button to displays the Set Custom Sort Order window. Click the fixtures in the left –hand pane in the order you want; the right-hand pane displays the selected order.

The Mirror Selected Fixtures checkbox puts the selection into the mirror image of whatever order you define. For instance if the fixtures are in the order 1-10, this changes the order so that the selection sequence becomes 1-10, 2-9, 3-8, 4-7, 5-6 instead of 1, 2, 3, 4, etc

The Descending checkbox sorts the selection in descending order based on the order you define.

Creating custom sort orders

The custom sort button displays the Set Custom Sort order window:



To sort fixtures in a particular order, select the fixtures in the order you want in the left-hand pane of the window then click OK.

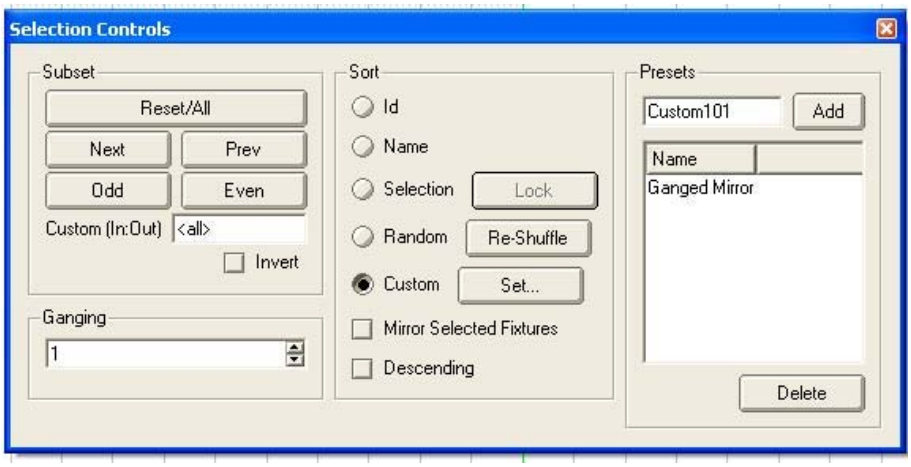
Saving and re-applying sort configurations

When you've set up a sort order that you like, you can save it so you can apply it to other groups of fixtures.

Saving sort methods

To save a sort method:

1. Click in the Presets name field:



2. Enter a name for the sort method.

3. Click the Add button to add it to the list of sorting methods.

To delete a saved sort method, select it from the list and click the Delete button.

Applying saved sort methods

To apply a sort method to a set of fixtures:

4. Select the fixtures then click the Sort button to display the Sort window.

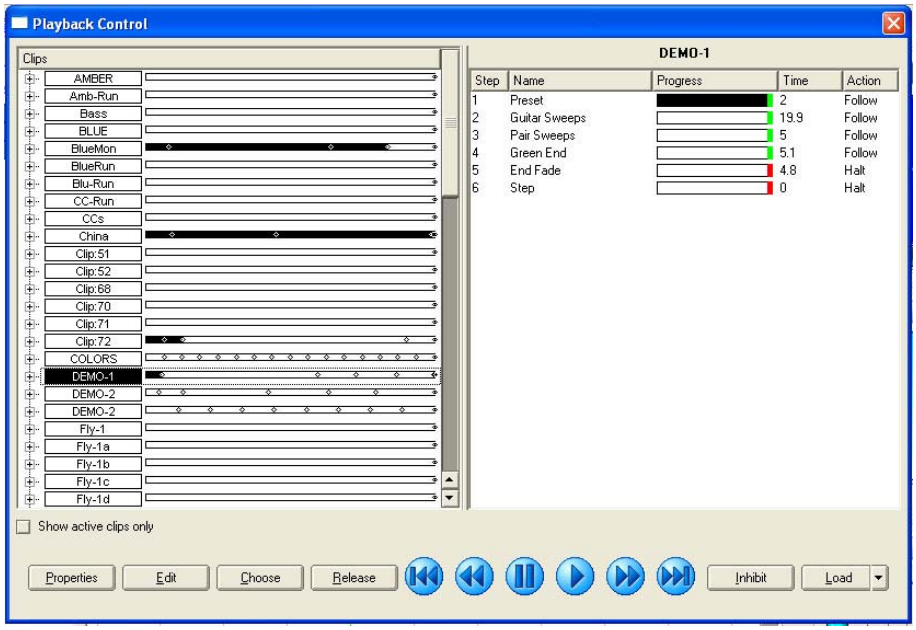
5. Click the Save tab.

6. Select the sort method you want from the list and click the Apply button.

Control and Monitor Playback

When you've got a full show going it's likely that you'll have multiple clips going at once.

To see what's going on at any time, hit the Playback Control button on the toolbar at the bottom of the screen. Vista displays the Playback Control window:



This screen lists all the clips that are playing and gives you a handy point from which to control and edit them. The left side of the screen displays a list of all Clips and the right column shows details for all the steps in the clip selected in the left column. You can filter the left column to display only the active clips by clicking the "Show Active Clips Only" checkbox

To take control of one or more clips, click on them to select them; you can then:

This button…	**does this…**
Properties	Displays the selected clip's properties.
Edit	Opens the selected clip in the programmer
Choose	Equivalent to pressing the Choose button for the selected clip.
Release	Releases the selected clip – fixtures return to their previous settings:
	Jumps to the start of the clip
	Steps backwards to the previous Step marker of the selected clip
	Pauses playback of the selected clip(s)
	Commences (Go) Playback the selected clip(s)

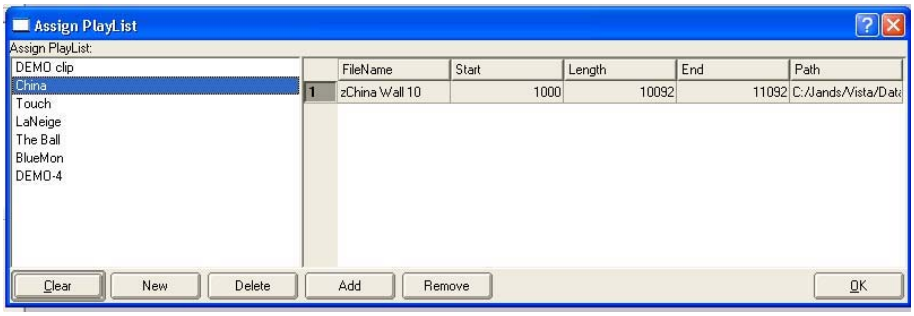
This button…	does this…
	Steps forwards to the next Step of the clip
	Jumps to the end of the selected clip.
Inhibit	Turns the selected clip off so that fixtures return to the settings defined by the previous event.
Load	Loads the selected clip onto either the left or right super playback screen and controls

Assigning audio to a clip

To assign audio to a clip:

1. Click the Components button on the toolbar to display the Components window:

2. Right-click on a clip and choose the Assign Audio option from the pop-up menu. Vista displays the Assign Playlist window:



3. Click the New button to create a playlist. Vista adds a new item to the list.

4. Enter a name for the playlist and press Enter, then click the Add button to add music to the playlist. Vista displays a File:Open window.

5. Open the folder containing your audio files and select a track you want to add, then click Open to add it to the list. Repeat this step for each track you want to add to the playlist. Vista displays the names and attributes of the tracks in the right-hand pane of the Assign Playlist window.

6. If you want the audio track to start at a point after the beginning of the clip, click the Start field and enter the number of milliseconds delay you want before the audio starts.

7. Click OK to return to the Components window. When you play this clip Vista plays the selected audio tracks with it, in the sequence in which you added them to the playlist.

Moving Tracks to another clip

Occasionally Clips get so large that they are difficult to work with and may impact on the performance of the console. There is a limit of 30,000 events per clip, if you approach this limit Vista will provide a warning and you can choose to start a new Clip or re-locate some information to another clip. To do this:

1. In the timeline view, select a group of fixtures (say all of one type) and right-click on the side Track tab
2. Select a Track – one new track will be automatically created and placed at the bottom of the list
3. The selected fixtures will be assigned to the selected track.
4. Select the "Re-locate to a new clip" command under the Clip menu. The Re-locate Tracks window opens.
5. Select the track to re-locate and click OK
6. A new Clip is automatically created and the original clip programming, for the selected track is imported.

Ganging Clips to synchronise playback

If you've re-located tracks as described above it may be convenient to gang the original and new clip together so that they are synchronized during playback . To do this:

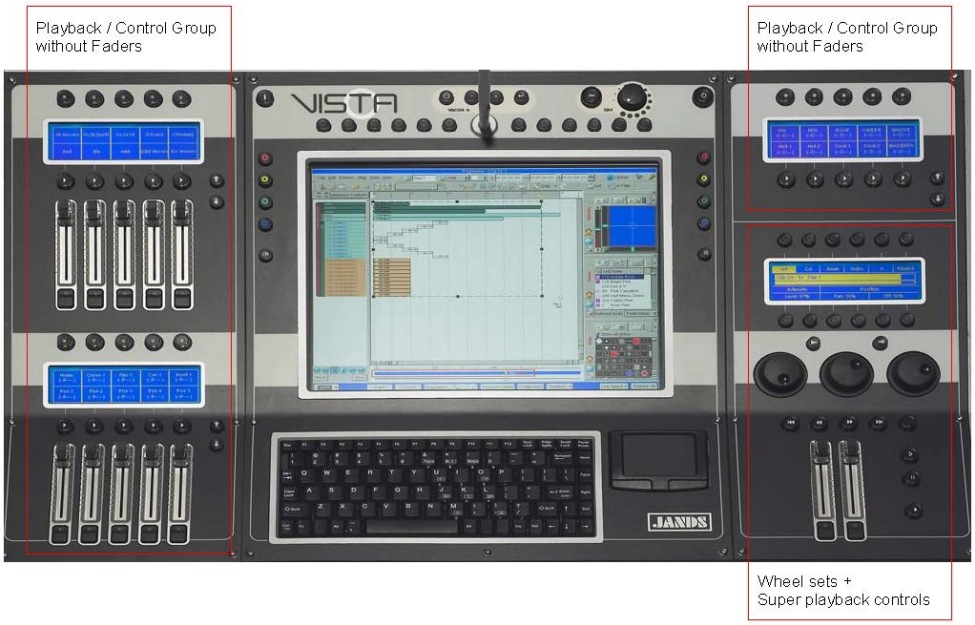
1. Choose the Clip Properties option from the Edit. Vista displays the Clip properties window.
2. Click on the "Ganging…" button at the bottom of the window. Vista displays the Ganging window:

3. Select the original Clip from the left hand column and the Clip to gang from the right hand column. Click OK
4. The two Clips will now play back together when either clip is activated. It is not necessary to have both clips on a playback.

Using the console hardware

Console layout

The Vista provides four playback groups with faders and two playback groups of five without faders. The two encoder-sets can also be used as Super Playbacks, (providing additional controls) as detailed later in this section.


Playback / Control Group without Faders
Playback / Control Group without Faders
VISTA
JANDS
Wheel sets + Super playback controls

Playback status indication

The LCD and LEDs inside the playback buttons indicate the current status of each playback as follows:

	Normal (2 Button Playback)			**Single (1 Button Playback)**
	Lower Button	Upper Button	LCD	Button
Current			Inverted	
Active		Green		
Paused	Green Flashing			Green Flashing
Running	Green			Green
Completed	Red			Red
Overridden		Red Flashing		Red Flashing

The 5 modifier keys

There are duplicate rows of the Modifier Keys to the left and right hand sides of the tablet. Both sets have the same functionality and you can use either set depending on which is most comfortable..

Modifier key functions

The table below describes the functions of the Modifiers, also listed are the keyboard equivalents used in the PC version:

	Standard (2 Button PB)		Dual (1 Button) PB
Modifier	Lower Button	Upper Button	Button
None	Go	Select	Go
Blue (ctrl+alt)	Off/On (Toggle)	* Page Change	* Page Change
Green (alt)	Skip back	Release	Release

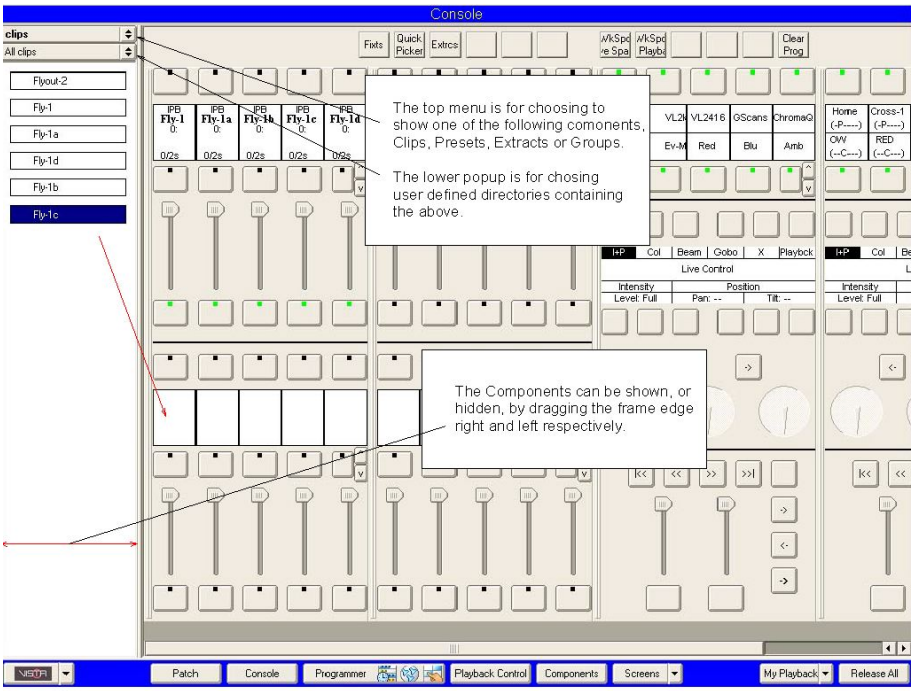
Yellow (ctrl)	Skip Fwd	Edit	Edit
Red (shift)	Pause/Back		Select

The ‘LR’ button changes a pen tablet tap to a right tap. To ‘right-click’ hold this button down then tap the pen.

Configuring the console

To open the Console window click the Console button on the toolbar. The Console window provides all the configuration tools to set the control surface up just the way you want.

To assign a clip (or Preset, Extract, Group) to a playback, drag it from the clip Pool (on the left of the tablet) to the LCD window above the desired playback:


Console
The top menu is for choosing to show one of the following comonents, Clips, Presets, Extracts or Groups.
The lower popup is for chosing user defined directories containing the above.
The Components can be shown, or hidden, by dragging the frame edge right and left respectively.
Patch
Console
Programmer
Playback Control
Components
Screens
My Playback
Release All

Assigning function keys

Above the main screen on the console there are twelve buttons. These are user-definable function keys. On the Vista PC version, the Function buttons ‘F1 – F12’ can be used in place of these buttons.

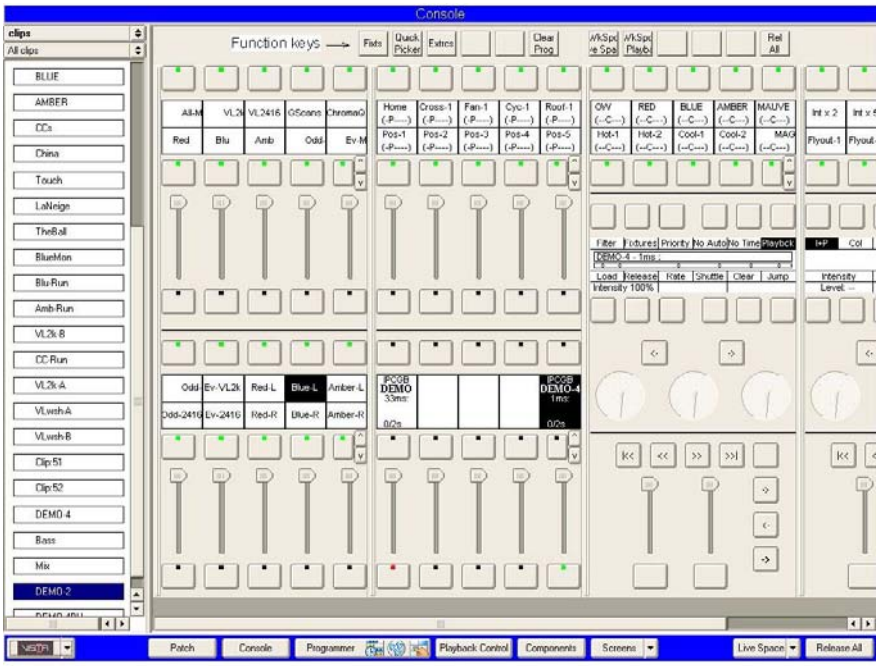
You can assign any function in the console to these keys so you have access to that function at the press of a button rather than having to choose the option from a menu.

Examples of functions that you might find useful to assign to a function key include:

- show the Presets window
- show fixture chooser
- clear programmer
- select a workspace
- release all
- save show

To assign a function to one of the function keys:

1. Click the Console button to display the Console screen. The function keys are at the top of the Console screen:



2. Right-click on the function key you want to assign.

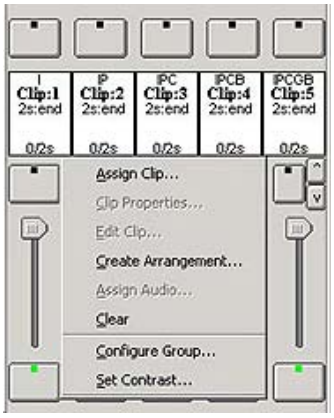
3. Choose the function from the pop-up menu. Vista labels the button. Now when you press that button the actual console, Vista takes whatever action you've assigned to that key.

Configuring playbacks

Playback groups, standard and dual modes

Each Playback Group of five can be configured for five or ten playbacks. They can also be configured to control clips, Presets, Extracts or Groups.

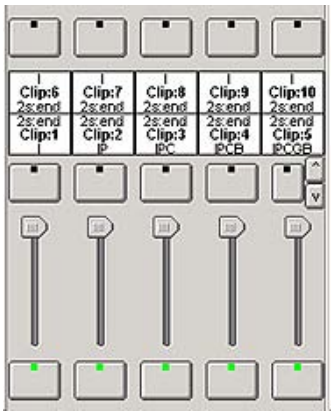
To configure a Playback Group, right-click on its LCD display in the Console window to show the popup menu for that group, and select 'Configure Group':



Vista displays the Playback Configuration dialogue box:

Set the playback group to Standard or Dual.

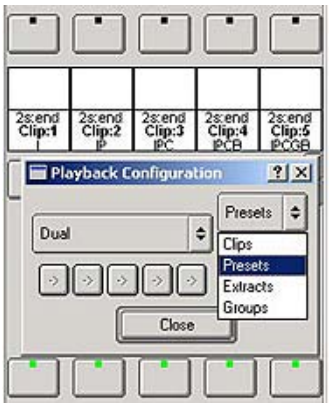
In Dual mode the Playback Group is split so the top row of buttons act as fader-less playbacks, independent of the lower row, and can be loaded with clips. This example shows ten clips on five playbacks



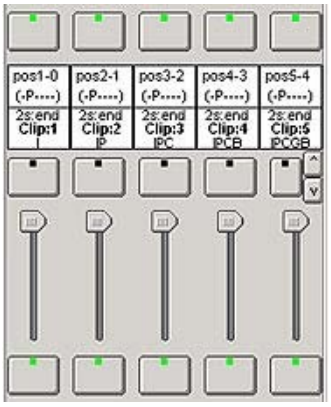
Tip: If clips are already assigned to the playbacks when the group mode is changed to Dual, the assigned clips will occupy the lower five playbacks, keeping their association with the fader.

Changing playback types

Use the Presets menu to configure the upper and lower row of playbacks for clips, Presets, Extracts or Groups:



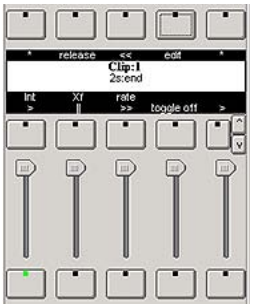
This example shows five faders with clips and five with presets:



Expanding playbacks

Playbacks can also be extended to provide more physical button controls for playback of a clip. Up to five playbacks in the group can control a clip:

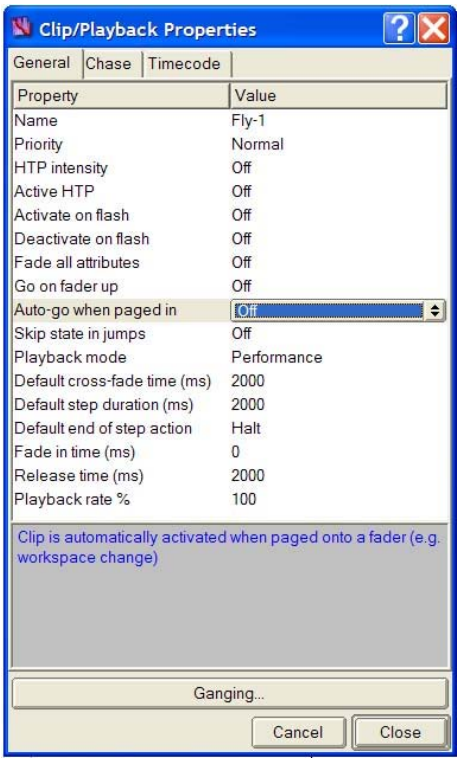
This example shows one clip occupying all five playbacks in a Playback Group:



Setting clip properties

To set the clip properties, choose the LCD popup menu item *clip Properties…* Vista displays the clip/Playback Properties window with the General tab selected:

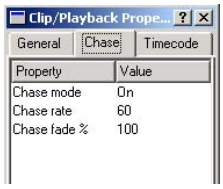
General tab



This property…	**does this…**
Name	Click here to enter a meaningful name for the clip
Priority	Sets the priority of this clip. A clip set to High priority can't be overridden by normal or low priority clips.
HTP Intensity	Determines whether or not the intensity overrides on the faders are calculated using highest-takes-precedence.
Active HTP	Causes the intensities of the clip/playback to activate as soon as the fader is moved from 0.
Activate on flash	Activates (plays) the clip whenever you press the flash button.
Deactivate on flash	Deactivates (releases) the clip whenever the flash button is released.

This property…	does this…
Fade all attributes	Allows a Playback fader to control all attributes. Moving the fader up or down will cause Intensity, Position Colour, etc to fade in or out.
Go on fader up	Activates the Clip when the fader is moved above 0%
Auto-go when paged in	Automatically activates the Clip when it is loaded to a playback fader by Page change
Skip state in jumps	When playback jumps forwards, any events that lie fully between the old position and the destination are ignored.
Playback mode	Determines what happens when using Jump on a super playback . Video – fades via all events. Performance – fades direct to destination. Rehearsal – like Performance but restores state on Jump.
Default Crossfade Time	The default time for Jumps & Overrides
Default Step Duration	The default duration for new steps (in ms)
Default end-of-step action	Sets the default action for steps – Halt or Follow
Fade-in time	The duration over which the clip fades-in when it starts (in milliseconds).
Release (Fade-out) time	The duration over which the clip fades-out when it is released (in milliseconds).
Playback rate %	Playback rate for the clip.

Chase tab



This property…	does this…
Chase mode	Turns chase mode on/off
Chase rate	Chase rate when in chase mode, expressed as steps-per-minute.

Chase fade %	Proportion of time spent fading vs. time spent at each step of a chase.

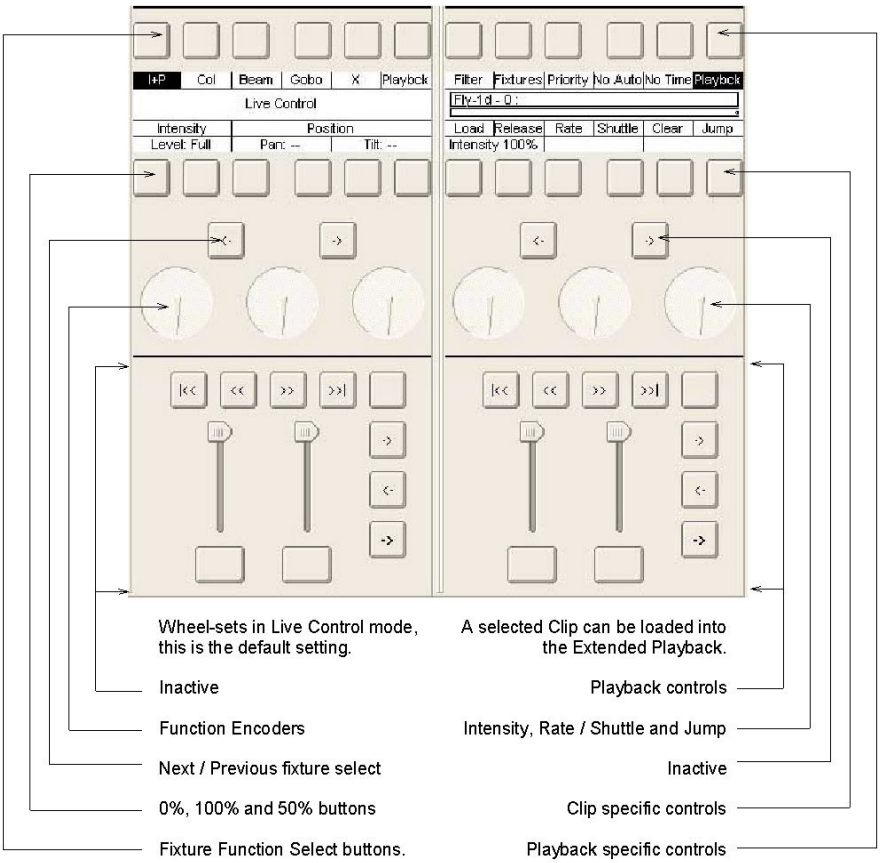
Timecode tab

This property…	**does this…**
Start @ time	Sets the trigger time in Hours, minutes, seconds or frames.
Sync to Time	Turns on timecode triggering for this playback.

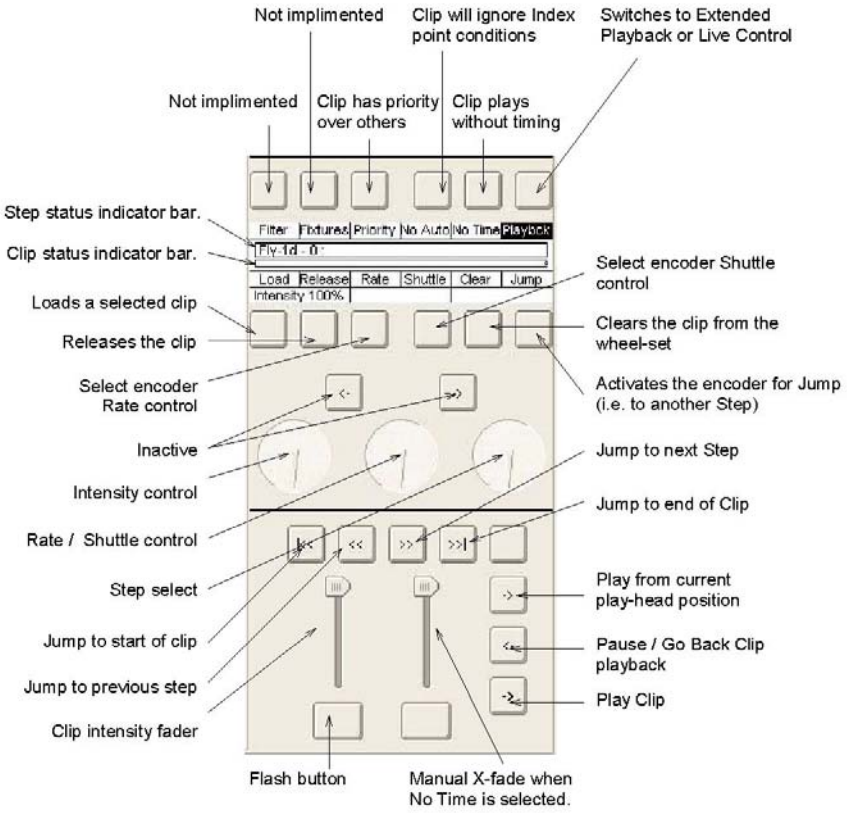
Encoders

The two modes

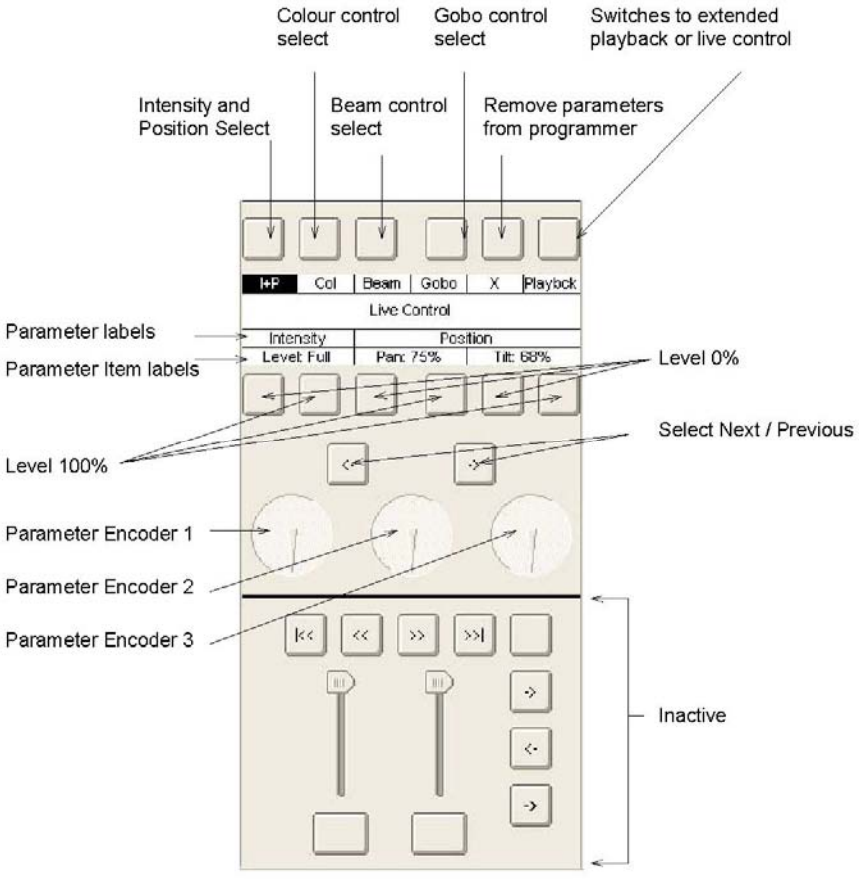
The Encoders can be used to control the Intensity, Position, Colour, Gobo and Beam parameters of Fixtures or , in combination with the faders and switches below to control playback of a clip.



Extended playback features


Not implimented
Clip will ignore Index point conditions
Switches to Extended Playback or Live Control
Not implimented
Clip has priority over others
Clip plays without timing
Step status indicator bar.
Clip status indicator bar.
Filter Fixtures Priority No Auto No Time Playback
Fly-1d - 0
Load Release Rate Shuttle Clear Jump
Intensity 100%
Loads a selected clip
Releases the clip
Select encoder Rate control
Inactive
Intensity control
Rate / Shuttle control
Step select
Jump to start of clip
Jump to previous step
Clip intensity fader
Select encoder Shuttle control
Clears the clip from the wheel-set
Activates the encoder for Jump (i.e. to another Step)
Jump to next Step
Jump to end of Clip
Play from current play-head position
Pause / Go Back Clip playback
Play Clip
Flash button
Manual X-fade when No Time is selected.

Live control features



Pages and workspaces

Pages

Each Playback Group can be paged independently of the others, allowing for a wide variety of console configurations. To change pages press the Up or Down arrow buttons located to the right of each playback group.

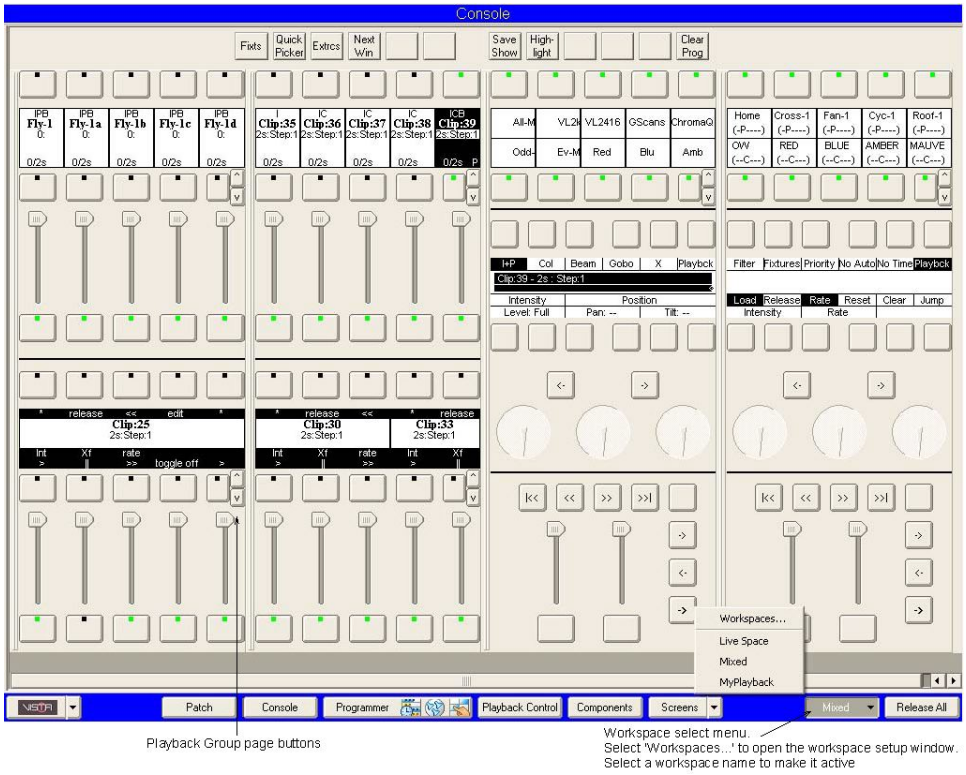
Tip: Playbacks can be Locked to prevent whatever is assigned to that location being changed when a new page is selected. To lock a Playback Right-click on LCD in the Console window and choose Lock.

Workspaces

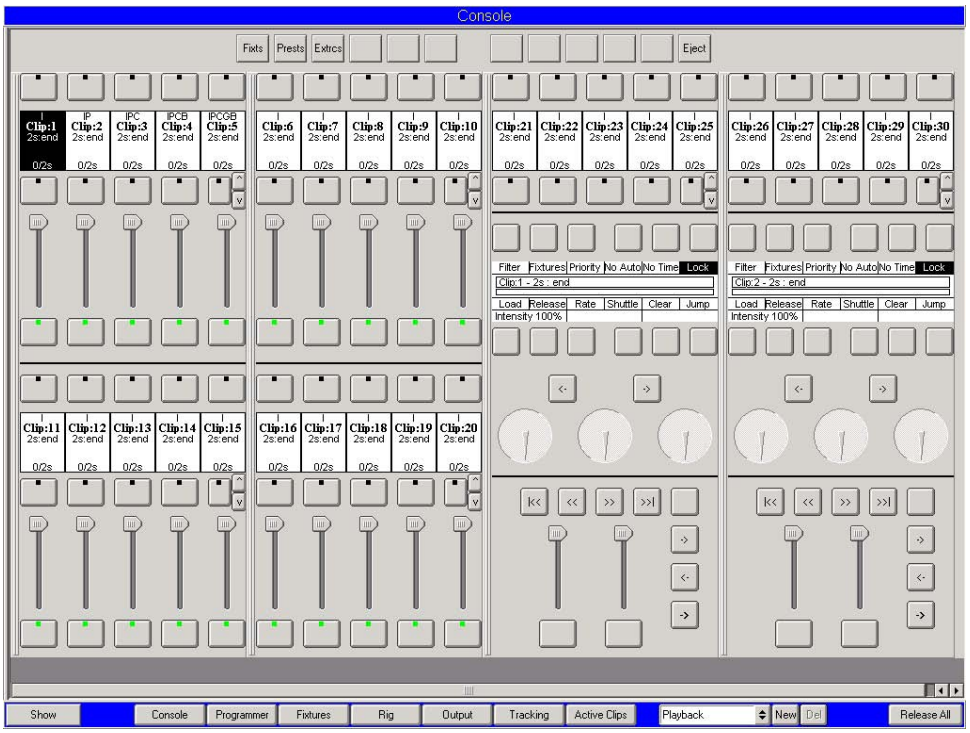
Workspaces are like global console pages: they allow you to save any console configuration you have created for recall later. For example, you may have one Workspace set up for programming with all the top row buttons on Playbacks assigned to Groups, Presets and Extracts, and another Workspace dedicated to playback.

To create a new Workspace, first set up and configure the pages you want for the Playback Groups, then click the Workspace selector and select the Workspaces option. You can then configure and name the Workspace in the setup window .

This example shows a Workspace that is mixed:

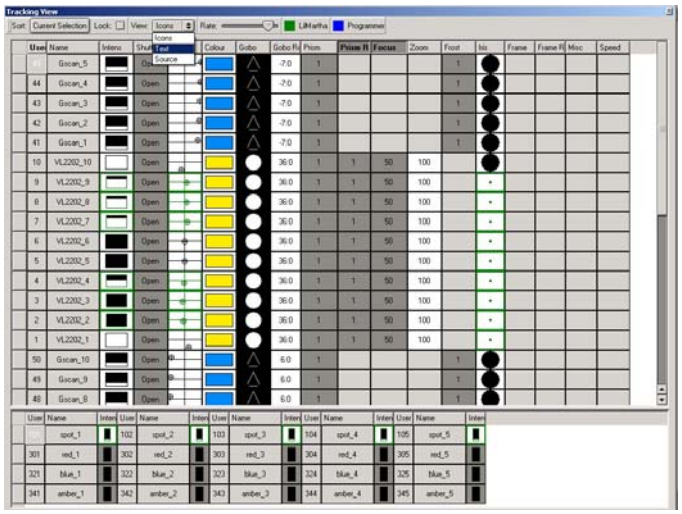


This example shows a Workspace dedicated to Playbacks:



Monitoring what is going on

When you click the Screens button on the toolbar and select the Output option, Vista displays the Output window in icon view:

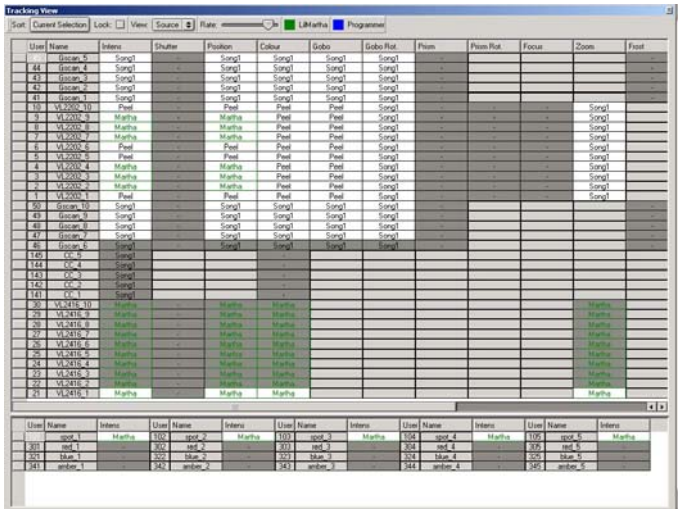


You use this screen to display the state of fixtures that are active – that is fixtures that have one or more parameters that are being controlled by the playbacks. The window is split vertically with multi-parameter fixtures displayed in the top pane and conventional fixtures (i.e. dimmers only) being shown in the lower pane.

Tip: To close the Output window, click the small 'X' box in the top-right corner of the screen's title bar. You can also resize this window by clicking on the bottom right corner and dragging to a suitable size.

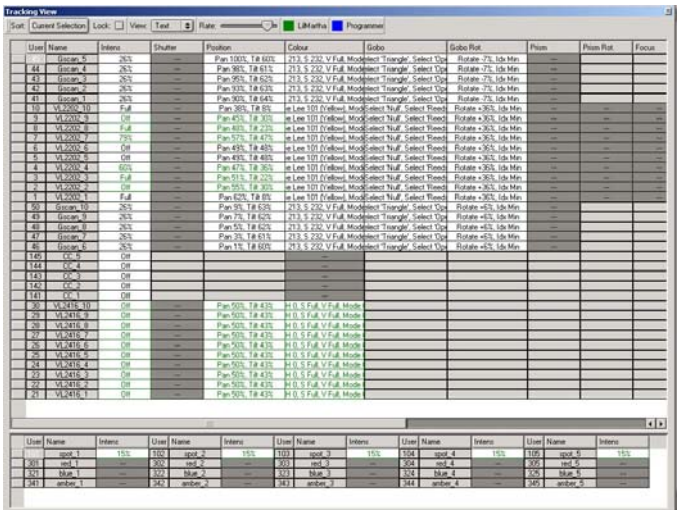
If you have external monitors attached, you can move the Output window to one of the by clicking on the title bar (blue area) and dragging. Use the touchpad to move the cursor to the external screens.

The Output window includes a drop-down menu that displays the Output information by, icon, text or source. The Output window set to Text view is shown below:



The text view shows the actual values of the parameters. If a parameter is set to a preset value, the name of the preset will be displayed rather than the value.

The Output window set to Source view is shown below:



The Source view shows the source of control for each of the parameters. For example if a fixture's colour settings have come from a clip named 'Rainbow', that name will be displayed in the Colour column for that fixture.

Using the Output window

The Output window provides some additional options that let you fine-tune the display and help identify particular fixtures

Scroll down the list until you find the fixture you want.

Sorting the Fixture List

If you click on the Sort 'Current Selection' button, fixtures that are selected in the Programmer Fixture window move to the top of the list. If you click in the Lock checkbox the sort order will be retained.

Setting the rate

You use the Rate slider to adjust how frequently the Output view updates. Move the slider to the left to slow the update rate and to the right to increase the update rate. On large shows with many fixtures and clips the Output window can use considerable system resources if set to the fastest refresh rate.

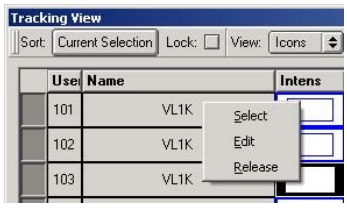
Chosen clip

To see what's being controlled by a particular playback fader, press the Choose button. The Output window then displays any information coming from that clip in green.

The Output window then displays any information coming from the programmer in Blue.

Context Menu

If you right click in an active cell on the tracking view window, Vista displays a pop-up menu:



Select

Chooses the playback that is currently controlling this feature.

Edit

Opens the clip that is currently controlling this feature in the Programmer.

Release

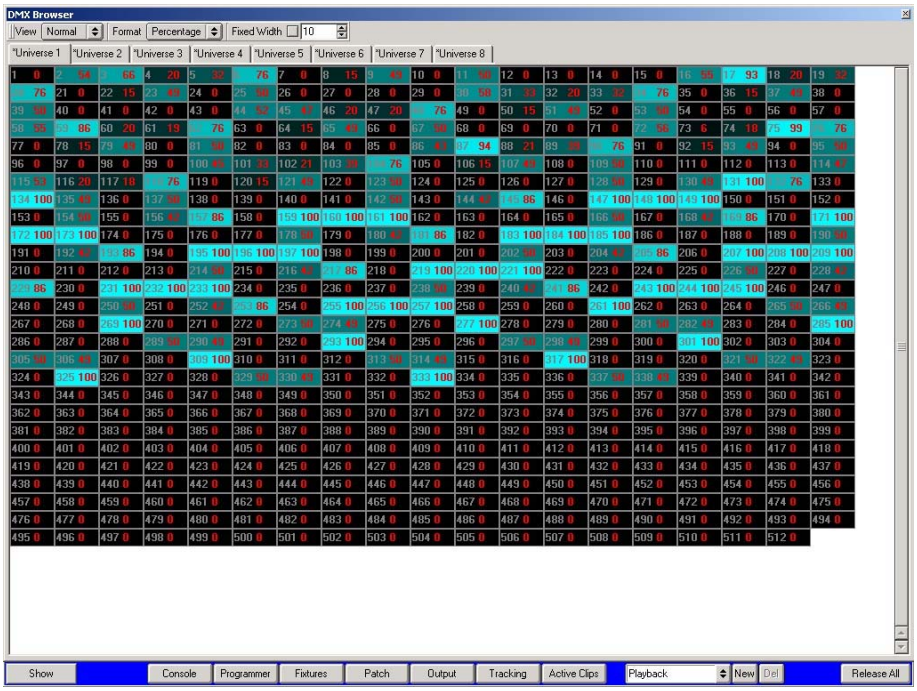
Releases the playback that is currently controlling this feature.

Selecting fixtures

If you click in the ID or name cell of a fixture in the tracking view window, Vista selects that fixture or adds it to the existing selection.

Using the DMX Window

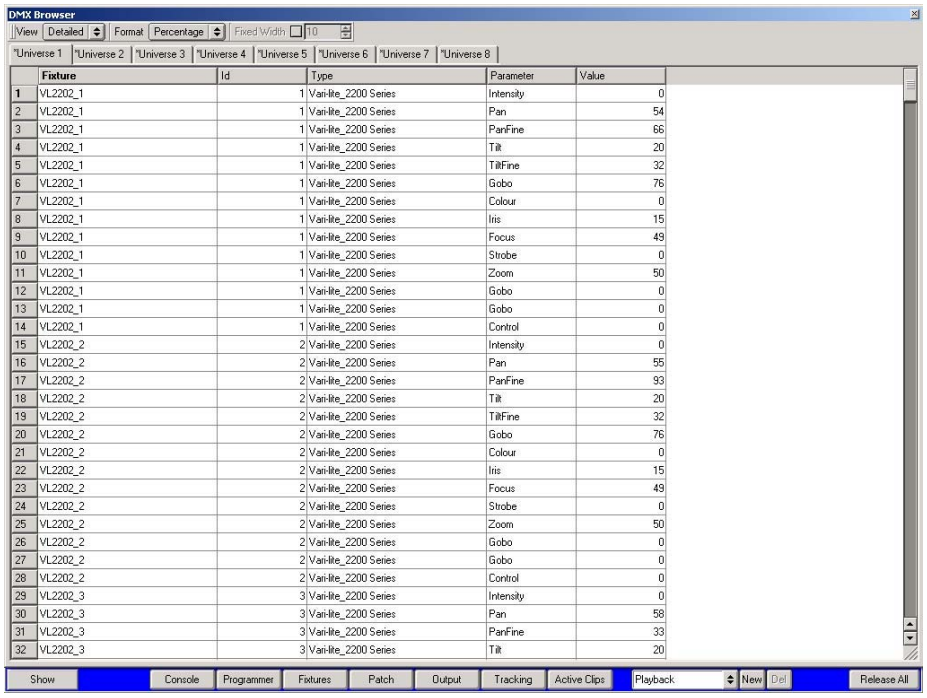
When you first click the Screens button on the toolbar and select the DMX option, Vista displays the DMX Output window:



You use this screen to display the output values of each and every DMX channel. The main window is divided into cells representing the 512 channels available on each DMX output. The cells are black if there is no output and change from dark to light blue as the output value increases. To display another output simply click on one of the other Universe tabs at the top of the display.

Tip: If you have external monitors attached the DMX window can be moved to one of these displays by clicking on the title bar (blue area) and dragging. Use the touchpad to move the cursor to the external screens

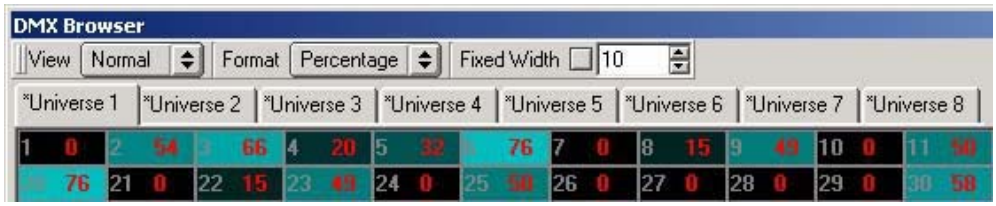
The DMX window includes a drop-down menu so you can view the DMX information in a more detailed list view. The DMX window set to detailed view is shown below:


DMX Browser
View Detailed Format Percentage Fixed Width 10
*Universe 1 *Universe 2 *Universe 3 *Universe 4 *Universe 5 *Universe 6 *Universe 7 *Universe 8
Fixture Id Type Parameter Value
1 VL2202_1 1 Vari-lite_2200 Series Intensity 0
2 VL2202_1 1 Vari-lite_2200 Series Pan 54
3 VL2202_1 1 Vari-lite_2200 Series PanFine 66
4 VL2202_1 1 Vari-lite_2200 Series Tilt 20
5 VL2202_1 1 Vari-lite_2200 Series TiltFine 32
6 VL2202_1 1 Vari-lite_2200 Series Gobo 76
7 VL2202_1 1 Vari-lite_2200 Series Colour 0
8 VL2202_1 1 Vari-lite_2200 Series Iris 15
9 VL2202_1 1 Vari-lite_2200 Series Focus 49
10 VL2202_1 1 Vari-lite_2200 Series Strobe 0
11 VL2202_1 1 Vari-lite_2200 Series Zoom 50
12 VL2202_1 1 Vari-lite_2200 Series Gobo 0
13 VL2202_1 1 Vari-lite_2200 Series Gobo 0
14 VL2202_1 1 Vari-lite_2200 Series Control 0
15 VL2202_2 2 Vari-lite_2200 Series Intensity 0
16 VL2202_2 2 Vari-lite_2200 Series Pan 55
17 VL2202_2 2 Vari-lite_2200 Series PanFine 93
18 VL2202_2 2 Vari-lite_2200 Series Tilt 20
19 VL2202_2 2 Vari-lite_2200 Series TiltFine 32
20 VL2202_2 2 Vari-lite_2200 Series Gobo 76
21 VL2202_2 2 Vari-lite_2200 Series Colour 0
22 VL2202_2 2 Vari-lite_2200 Series Iris 15
23 VL2202_2 2 Vari-lite_2200 Series Focus 49
24 VL2202_2 2 Vari-lite_2200 Series Strobe 0
25 VL2202_2 2 Vari-lite_2200 Series Zoom 50
26 VL2202_2 2 Vari-lite_2200 Series Gobo 0
27 VL2202_2 2 Vari-lite_2200 Series Gobo 0
28 VL2202_2 2 Vari-lite_2200 Series Control 0
29 VL2202_3 3 Vari-lite_2200 Series Intensity 0
30 VL2202_3 3 Vari-lite_2200 Series Pan 58
31 VL2202_3 3 Vari-lite_2200 Series PanFine 33
32 VL2202_3 3 Vari-lite_2200 Series Tilt 20
Show Console Programmer Fixtures Patch Output Tracking Active Clips Playback New Del Release All

The detailed view displays each channel on a separate line. In this view you can see the Fixture Name, ID, Type, Parameter Type and value.

DMX window features

The DMX Output window provides some additional options so you can fine-tune the display:


DMX Browser
View Normal Format Percentage Fixed Width 10
*Universe 1 *Universe 2 *Universe 3 *Universe 4 *Universe 5 *Universe 6 *Universe 7 *Universe 8
1 0 2 54 3 66 4 20 5 32 6 76 7 0 8 15 9 49 10 0 11 50
20 76 21 0 22 15 23 49 24 0 25 50 26 0 27 0 28 0 29 0 30 50

View

View options are detailed above – Normal or Detailed

Format

The format optional allows you to display output levels as either a Percentage (0 – 100%) or as an 8-bit value, between 0 and 255

Fixed Width

If this box is not ticked the Output window will automatically resize as the window is resized. For example if the window is made smaller, fewer cells will be displayed across the screen. If the box is ticked the window will always display the specified number of cells, across the screen, and it may be necessary to use the horizontal scroll bar to see all the cells.

Width

The value in this box sets the number of cells that displayed across the screen. You can either type a number in this box or use the small up and down arrows to adjust the value.

Appendix 1, Menu & toolbar reference

Patch screen menus

View menu

This menu has one option, 'Short Names'. Selecting this displays the abbreviated versions of the fixture names. Select it again to display the full names.

Edit menu

This option…	**does this…**
Undo (Ctrl+Z)	Cancels your last action.
Redo (Ctrl+Y)	Repeats your last action.
Delete (Del)	Deletes the selected fixtures.
Copy (Ctrl+C)	Copies the selected fixtures.
Paste (Ctrl+V)	Not used.
Rename	Displays the Rename window so you can give the selected fixture a name.

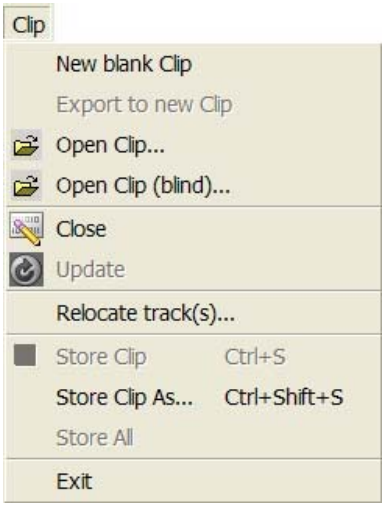
This option…	does this…
Renumber	Displays the Renumber window so you can change a fixture's ID number or set the starting number of a group of selected fixtures.
Multi-patch	Displays the Multiple patch window for adding fixtures with the same ID.
Export patch…	Displays the Export patch window.
Import patch…	Displays the Import patch window.

Control menu

This option…	does this…
Strike	Strikes the selected fixtures.
Douse	Douses the selected fixtures.
Reset	Resets the selected fixtures to their default settings.
Home	Sends the selected fixtures to their home position.
Park	Parks the selected fixtures so they won't move from their current position.

Programmer screen menus

Clip / Live menu



This option…	does this…
New blank clip	Creates a new clip, opening the timeline window.
Export to new clip (from Live tab only)	Exports the contents of the Live tab to a new Clip.
Open Clip	Opens an existing Clip
Open Clip Blind..	Opens an existing Clip in Blind mode
Close	Clears any changes you've made but leaves the clip.
Update	Opens the update window so you can choose to update either a clip and the palettes used by that clip
Relocate tracks	Opens the Relocate Tracks to new Clip window so you can move all programming for fixtures in that track to a new Clip – see Appendix
Store Clip	Saves whatever changes you've made to the current clip.
Store Clip As... (Ctrl+Shift+S)	Displays the Store Clip To window so you can assign the clip to a location on the console or save to the Clip pool.
Store All	Saves all open clips.

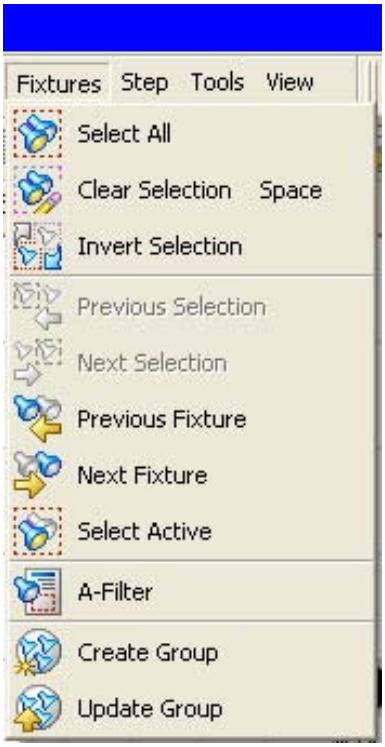
This option…	does this…
Exit	Exits the clip and returns you to the previous window.

Edit menu

This option…	does this…
Undo (Ctrl+Z)	Cancels your last action.
Redo (Ctrl+Y)	Repeats your last action.
Cut (Ctrl+X)	Cuts the selected events.
Copy (Ctrl+C)	Copies the selected events.
Paste (Ctrl+V)	Pastes the selected events to the point on the timeline marked by the left-hand yellow marker.
Paste Special (Ctrl+Shift+V)	Displays the Paste Special window so you can choose which attributes of the event you copied to paste.
Delete (Del)	Removes the selected event from the timeline.
Select All (Ctrl+A)	Selects every event on the timeline.
Select similar	Selects every event that has similar characteristics (e.g. start and end points).

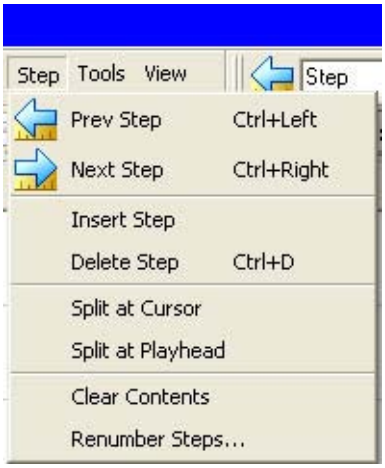
This option…	does this…
Clip Properties	Displays the Properties window so you can make adjustments to the selected clip that override the system preferences (see *Clip preferences*)
Append to Clip	Displays the Store Clip To window so you can append the contents of the Live tab to the end of an existing Clip

Fixtures menu



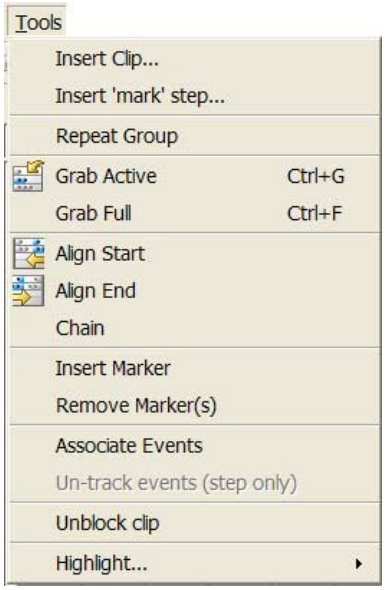
These options are duplicates of the icons on the toolbar. See *Programmer screen toolbar*.

Step menu



This option…	does this…
Prev Step (Ctrl+Left)	Jumps to the start of the previous step on the timeline.
Next Step (Ctrl+Right)	Jumps to the start of the next step on the timeline.
Insert step	Inserts a step at the point marked by the yellow diamond markers.
Delete step (Ctrl+D)	Deletes the selected step.
Split at cursor	Splits the selected steps at the point marked by the yellow diamond markers (see *Splitting steps*).
Split at Playhead	Splits the selected steps at the point marked by the green playhead marker line
Clear Contents	Clears everything in the currently selected step (the grey area on the timeline scale).
Renumber Steps	Opens the Step renumbering dialogue box

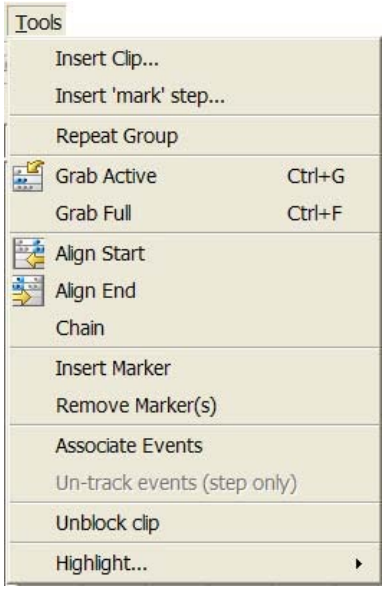
Tools menu



This option…	does this…
Insert clip	Opens the clip picker window so you can insert another clip inside the one being edited

This option…	does this…
Insert 'Mark' Step	Displays the Insert Mark Step window. This enables you to move fixtures when their intensity is at zero so they're in the right position when they turn on.
Repeat group	When you have one or more events selected, this option creates a duplicate of them, immediately after them on the timeline.
Grab active (Ctrl+G)	Grabs the active attributes of any clips currently playing (see *Grabbing*)
Grab full (Ctrl+F)	Grabs all the attributes of any clips currently playing (see *Grabbing*)
Align start	Aligns the start points of the selected events.
Align midpoints	Aligns the midpoints of the selected events.
Align end	Aligns the end points of the selected events.
Chain	If you have several events selected, this option joins the beginning of the second to the end of the first, and so on, so they play in sequence.
Quantise	Displays the Quantise window so you can adjust the duration of an event to match the timing of a musical beat.
Unmodulate	Removes effects component from selected events
Associate	If you select multiple events of any kind this option combines them all into one so you can make large-scale changes to the timeline on multiple events.
UnTrack	Undo the effect of the selected events. Equivalent to "Cue-only"
Highlight	Opens the Highlight window so that you can set or modify the Highlight preset

View menu

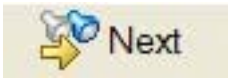


This option…	does this…
Timeline	Switches the programmer to the Timeline view
Fixture Chooser	Switches the programmer to the Fixture view
Quick Picker	Switches the programmer to the Fixture view (see *Using the Programmer Quick* Picker).
Palettes	Displays the various palettes and windows.
Fixture arrangement	Opens the fixture arrangement sub-menu so you can switch to a table or icon view and arrange fixture icons
Normal	Resets the timeline view to the default zoom.
Fit to window	Displays the entire timeline in the window at once.
Fit to step	Zooms the timeline window to show only the current step.
Fit to selection	Zooms the timeline window to show only the selected step.
Zoom in (+)	Increases the magnification level of the timeline window, decreasing the number of visible steps but showing more detail.
Zoom out (-)	Decreases the magnification level of the timeline window, increasing the number of steps visible and decreasing the level of detail.

This option…	does this…
Insert marker	Inserts a green position marker on the timescale above the timeline.
Remove marker(s)	Delete any markers within the grey shaded area around the yellow diamond markers on the timescale.
Snap to grid	Turns on the snap function so that events will automatically snap to the timeline grid.
Timeline Grid	Displays the Grid interval window so you can define the width of the timeline grid in milliseconds.
Timeline units	Sets the units used on the timeline, either SMPTE time, hours/minutes or seconds or beats per minute.
Set timeline origin	Sets the start point (zero seconds) of the timeline to either the start of the selected step, selected clip, or to the cursor point.
Show Audio Bar	Shows or hides the Audio bar on the timeline.

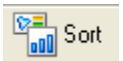
Toolbars

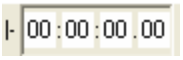
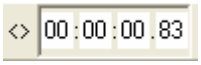
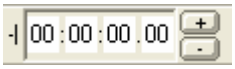
Patch screen

This icon…	does this…
	Ignites the lamp(s) in the selected fixture(s).
	Switches the lamp(s) in the selected fixtures off.
	Resets the selected fixtures to their factory default settings. This is useful if a fixture has a control problem and you need to get it 'back to normal'.
	Puts the fixture back to its home position.
	Parks the fixture permanently in whatever setting it's currently in. This is useful for providing permanent fixtures for backstage, orchestra pits and so on. Once you've parked a fixture it will ignore any further instructions you give it.
	Deselects whatever is selected and Selects the next fixture in this universe.
	Selects the previous fixture in this universe.
	Switches the selected fixture on. This is a toggle switch – while it's selected, Vista switches on fixtures as you select them.
	Displays the Connect Universes screen so you can attach external Ethernet-DMX interface boxes. See *Configuring external Ethernet-DMX interfaces*.

Programmer screen

This icon…	does this…
	Displays the list of summary options (see *Using the summary views*).
	Cuts the selected events.

This icon…	does this…
	Copies the selected events
	Pastes any cut or copied events at the point on the timeline marked by the left-hand yellow triangle marker.
	Undo (Ctrl+Z)/Redo (Ctrl+Y)
	Previous/Next fixture selection. Vista remembers the last set of fixtures you selected; you use these icons to toggle back and forth between these selections.
	De-selects all currently selected fixtures.
	Selects every fixture.
	Inverts the fixture selection (i.e. all selected fixtures are de-selected and all de-selected fixtures are selected).
	Selects all the active fixtures (i.e. those in use in the current clip).
	Select all the fixtures that are programmed in the current clip.
	Align start/end. Align the start or end points of the selected events.
	Displays the Grab drop-down so you can grab either active or full events of the clip currently playing (see *Grabbing*).
	Displays the Effects window (*see Using effects*).
	Displays the Sort window (see *Selecting and sorting fixtures in* the timeline).
	Displays the Active filter window.
	Displays the Update (Clip / Preset) window
	Toggles between the highlight modes.
	Steps forward or back through the steps on the timeline.

This icon…	does this…
	Displays the list of actions available at the end of a step: halt, follow on or trigger (see *Setting the end of step instructions*).
	Displays the list of fade path options (see *Setting the fade path*).
	Displays the start time of the selected event in hours, minutes, seconds and hundredths of seconds.
	Displays the duration of the selected event.
	Displays the end point of the selected event.
New Group	Creates a new fixture group containing all the currently selected fixtures.
Update Group	Updates the current group to contain whatever fixtures are selected.
Delete Group	Deletes the selected group.
	Displays the list of available views.

Appendix 2, Installing new software

Software Clean Install

To completely reinstall the operating system and all files on the hard drive.

1. Export any required show data from the hard drive (see above).
2. Insert an Installation CD into the consoles CD ROM drive. Leave the armrest open.
3. Shutdown console.
4. Restart console. Console will boot from the CD.
5. Follow the installer prompts to perform a clean install (using the touchpad only). Installation takes approximately 10 minutes.
6. When prompted click OK to finish. Leave the armrest open at this stage and remove the CD when it is ejected. The console will shutdown by itself.
7. Restart the console, CD ROM will close. It will start normally and automatically run the new software version.

Tip: This procedure completely reinstalls the operating system and all files on the hard drive, which takes approximately 10 minutes to complete. All show data on the hard drive will be lost to export the shows).

This Clean Install process should be used if a new hard drive has been installed.

Software Installing Updates

The Vista software consists of the following three components:

- Application

- Fixture Library

- Drivers

To view the current installed version of each component select 'About Vista' from the Vista menu.

If required, software update files can be downloaded from the Jands web site. Burn the file(s) to a CD (standard data CD, ISO9660 format) using common CD burn software, or upload the files to the console using FTP.

To upload software update files to the console through an ethernet connection from a normal computer:

1. Select 'User Preferences' from the Vista menu and note the console's IP address.

2. On the computer start an FTP client (eg. Internet Explorer 5.0, Fetch) to the consoles IP address (eg. ftp://192.168.0.65/), username = vista-update, password = update.

3. This will display the /vista/update directory. Copy the software update file(s) *.tgz to this directory on the console.

With the software update file(s) on a CD or on the consoles hard drive, apply the update to the console.

4. Select 'Check For Updates' from the Vista menu.

5. Select 'Update from CD' or 'Update from FTP upload directory'.

6. Open a *.tgz file.

7. Tick the required software component(s) to update and follow the prompts.

Tip: Installing updates does not overwrite the show data on the hard drive.

Connecting to the console via FTP

You can take advantage of the Vista's built-in FTP server to move files from a Mac or PC to the Vista or vice versa using FTP (File Transfer Protocol, a common method of file transfer).

Hardware Setup - Connect the console and computer to an Ethernet hub or switch using a standard Ethernet cable, or connect the two devices to each other using a crossover Ethernet cable.

Vista Software Setup

Open the User Preferences from the Vista menu, select the General tab and check the "IP Address" setting. If the IP address is already set, make note of the address and close the Preferences. If there's no IP address or it's set to 0.0.0.0, you'll need to assign one. The address is four groups of numbers from 0 to 255, all connected by periods. Typically, you'll use an IP addresses starting with 192.168 (e.g., 192.168.0.65).

Computer Software Setup

Check that the computer's TCP/IP properties are set to a different IP address in the same subnet (192.168.0.100, for example). The subnet mask should be, 255.255.255.0.

If necessary refer to your computers documentation for how to set the IP address.

Using FTP

On the computer start an FTP client such as Coffee Cup Direct FTP or CuteFTP and open a connection to the consoles IP address (192.168.0.65). The connection requires a username and password as follows:

Username: vista-user

Password user

The contents of the consoles Show Data directory and sub folders will be displayed. Files can now be transferred to and from the Vista.

If the console is not booting properly it maybe possible to copy files using this method.

Appendix 3, The touchpad and the pen tablet

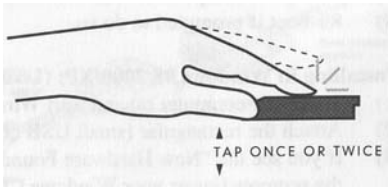
Using the touchpad

Like all pointing devices, the touchpad may take a short time to get used to. However you will soon find that using this device is natural and intuitive. Simply glide your finger across the surface of the pad to move the cursor and tap your finger to "click". It's easy!

Click

To click, lightly and quickly tap the surface of the pad once. Or, press the left button once.

To double-click, double tap on the pad or click the left button twice.



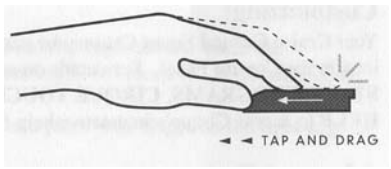
Remember, the touchpad responds best to a very firm, crisp tap.

Right Click

To right-click for submenus, tap the tap zone in the upper right corner of the touchpad or click the right button once.

Drag

To drag, draw, or highlight, double-tap rapidly and hold your finger down on the second tap, then glide to move. You may also hold the left button as you glide your finger.



Glide Extend

To drag further than the pad surface, lift and reposition your finger after reaching the textured edge. GlideExtend will virtually eliminate the edge of the pad while you drag. In other words, if you are dragging an item and you hit the textured edge, GlideExtend will hold the drag for three seconds while you reposition to complete the drag. To shut off GlideExtend earlier than three seconds, simply tap or click a button.

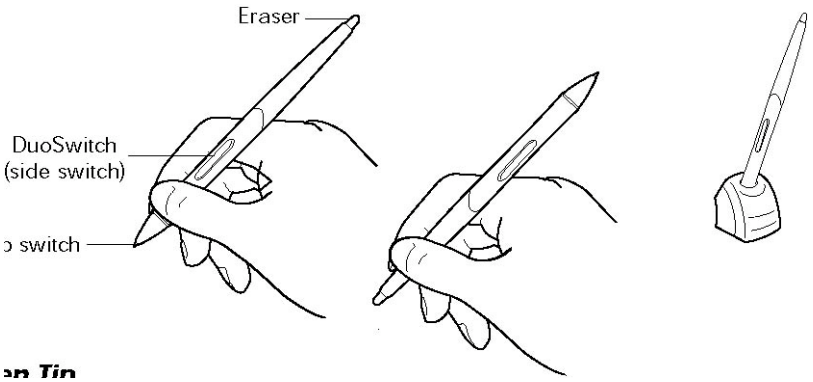
Scroll4

To scroll, place your finger down the right edge of the touchpad and glide up or down. This feature requires third party software on Macintosh systems (see Macintosh advanced features section for USB version of Easy Cat).

Working with the grip pen

This information is kindly provided by Wacom, the pen tablet manufacturer.

As you work with the pen-tablet, you can rest your hand lightly on the display screen, just as if it were a drawing board or sheet of paper. Hold the Grip Pen as you would a pencil. Make sure the side switch is in a convenient location where you can press it with your thumb or forefinger, but won't accidentally press it while drawing.



Tip: The Grip Pen should never be stored in a container where it will rest on its tip or eraser. When the pen is not in use, place your pen in the pen holder or lay it flat on your desk.

Tip switch / Pen Tip

The pen is activated as soon as it enters proximity, about 5 mm (0.2 in), above the Interactive Pen Display screen. This allows you to position the screen cursor or use the DuoSwitch without touching the pen tip to the display screen.

When pressure is applied to the pen tip, the tip switch is turned *on* and the pen simulates a mouse button click.

Eraser

To use the eraser, hold the Grip Pen upside down. When the eraser is within proximity of the active area, the tablet reports the pen coordinates and the pressure applied to the eraser.

The eraser is not implemented in Version 1 of the Vista software.

DuoSwitch

The DuoSwitch can be used to perform the same click and double-click functions as the tip switch. Toggle the DuoSwitch in either direction to activate the upper or lower button functions.

Tip: If you do not care to use the side switch, you can remove if by following the directions in *Removing and installing the Duo Switch*.

Using a pen

Pointing and Selecting

Move the Grip Pen above the pen tablet display screen to position the screen cursor. The cursor jumps to the location where you place the pen (absolute positioning). Press the pen tip on the display screen to make a selection.

Clicking

Tap the display screen once with the pen tip, or touch the pen to the display screen with enough pressure to generate a mouse click.

Double-Clicking

Press the upper side switch, or quickly tap the display screen twice in the same place with the pen tip. Double-clicking is easier when the pen is perpendicular to the tablet screen.

Dragging

Select an object, then slide the pen tip across the display screen to move the object.

Erasing

Erasing is not currently supported in the Vista system.

Working with the Pen tablet

As you work with the pen tablet, you can rest your hand lightly on the display screen, just as if it were a drawing board or sheet of paper.

Because the drawing surface will be a little higher than a normal desk, consider adjusting the height of you desk or chair to assure comfortable use of the device.

When working with the pen tablet, maintain a good posture at all times and change your position if you feel any discomfort due to your work position or the weight of the tablet.

The Interactive Pen Display should be positioned so you can view it comfortably with a minimum of eyestrain.

Here are some other points to keep in mind:

- Take short breaks between tasks to stretch and relax your muscles.
- Use a gentle grip when working with the pen.
- Alternate tasks throughout the day.
- Minimize awkward postures and repetitive movements that cause discomfort.

Working with On Screen Display Settings

The pen tablet display is equipped with an On Screen Display function. The OSD function enables you to adjust and optimize a variety of display settings at the touch of a button. The OSD controls are located above the tablet.

Menu button	Select buttons	Enter button
Opens or closes the OSD menu	Opens or closes the OSD menu	Activates or de-activates the selected option

Selection buttons

Use these buttons to select an option that can then be activated when you press the **Enter** button.

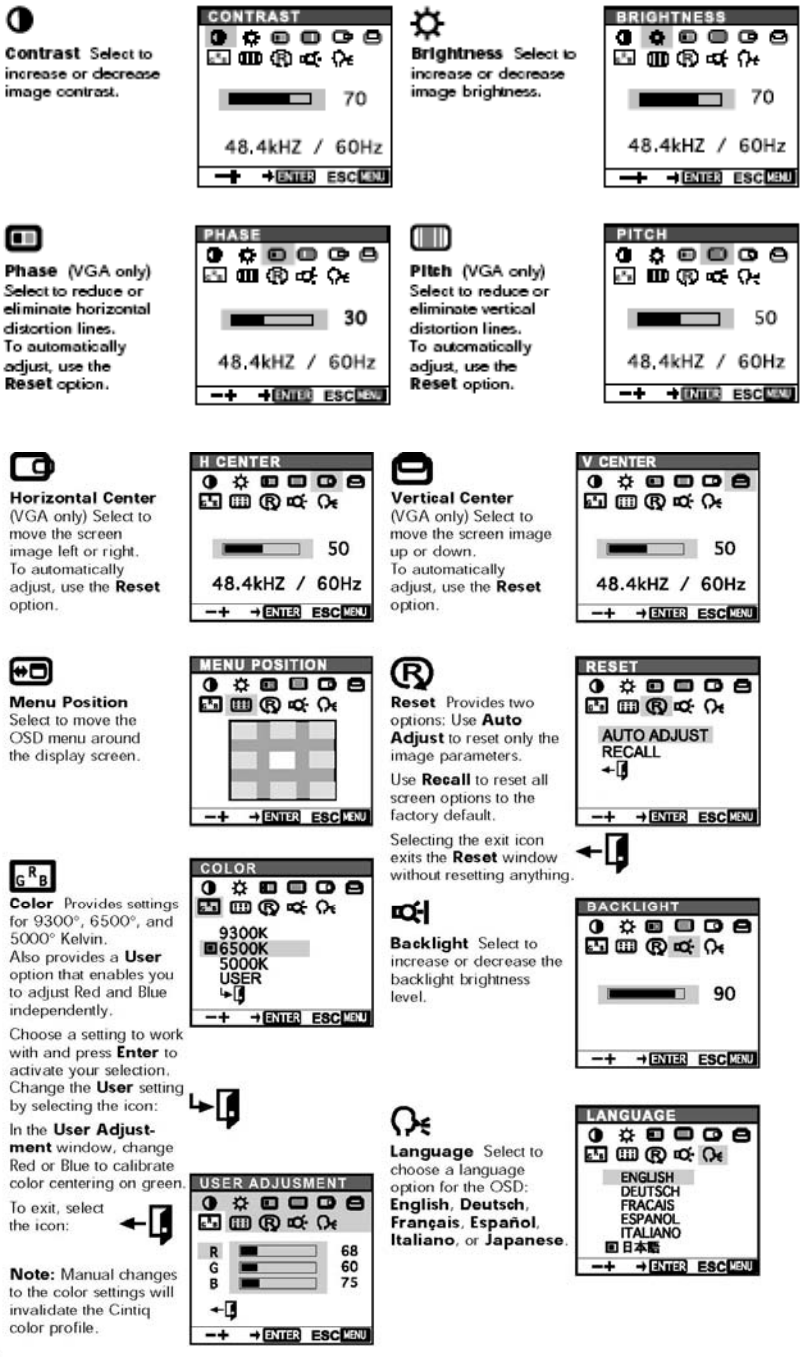
After activating a selected option, press the **+** button to increase a selected item value, and press the button to decrease it.

The basic process for working with the OSD is as follows:

8. Press the Menu button to open the OSD main menu.
9. Use the + or - buttons to select an option. When the option you want to adjust is highlighted, press the Enter button. The current settings and adjustment sub-menu for that option will appear.
10. Use the + or - buttons to adjust the option settings.
11. When you have made your changes, press the Enter button to save. To exit, press the Menu button.

Tip: All settings are automatically saved when the OSD menu closes. If you make changes to the display appearance and cannot return to the original settings, use the **Reset Recall** option to return The pen tablet to its original factory defaults.

When you open the On Screen Display (OSD), the following menu options are displayed:


Contrast Select to increase or decrease image contrast.
CONTRAST
70
48.4kHZ / 60Hz
ENTER ESC MENU
Brightness Select to increase or decrease image brightness.
BRIGHTNESS
70
48.4kHZ / 60Hz
ENTER ESC MENU
Phase (VGA only) Select to reduce or eliminate horizontal distortion lines. To automatically adjust, use the Reset option.
PHASE
30
48.4kHZ / 60Hz
ENTER ESC MENU
Pitch (VGA only) Select to reduce or eliminate vertical distortion lines. To automatically adjust, use the Reset option.
PITCH
50
48.4kHZ / 60Hz
ENTER ESC MENU
Horizontal Center (VGA only) Select to move the screen image left or right. To automatically adjust, use the Reset option.
H CENTER
50
48.4kHZ / 60Hz
ENTER ESC MENU
Vertical Center (VGA only) Select to move the screen image up or down. To automatically adjust, use the Reset option.
V CENTER
50
48.4kHZ / 60Hz
ENTER ESC MENU
Menu Position Select to move the OSD menu around the display screen.
MENU POSITION
ENTER ESC MENU
Reset Provides two options: Use Auto Adjust to reset only the image parameters.
Use Recall to reset all screen options to the factory default.
Selecting the exit icon exits the Reset window without resetting anything.
RESET
AUTO ADJUST
RECALL
ENTER ESC MENU
Color Provides settings for 9300°, 6500°, and 5000° Kelvin.
Also provides a User option that enables you to adjust Red and Blue independently.
Choose a setting to work with and press Enter to activate your selection.
Change the User setting by selecting the icon:
In the User Adjustment window, change Red or Blue to calibrate color centering on green.
To exit, select the icon:
Note: Manual changes to the color settings will invalidate the Cintiq color profile.
COLOR
9300K
6500K
5000K
USER
ENTER ESC MENU
USER ADJUSMENT
R 68
G 60
B 75
ENTER ESC MENU
Backlight Select to increase or decrease the backlight brightness level.
BACKLIGHT
90
ENTER ESC MENU
Language Select to choose a language option for the OSD: English, Deutsch, Français, Español, Italiano, or Japanese.
LANGUAGE
ENGLISH
DEUTSCH
FRACAIS
ESPANOL
ITALIANO
日本語
ENTER ESC MENU
30

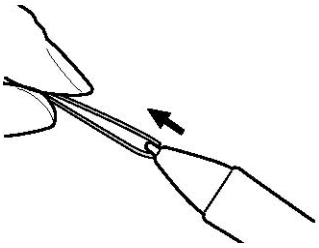
Cleaning the Pen-Tablet

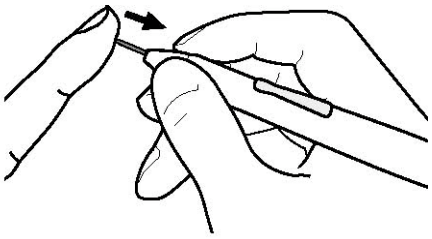
To clean the Grip Pen, use a soft cloth and mild detergent (such as dishwashing liquid) diluted with water. Do not use paint thinner, benzine, alcohol, or other solvents.

To clean the display screen, use an anti-static cloth or a slightly damp cloth. When cleaning, apply only a fixture amount of pressure to the display screen and do not make the surface wet. Do not use detergent to clean the display screen; this may damage the coating on the screen. Please note that damage of this kind is not covered by the manufacturer's warranty.

Replacing the Pen Tip

The pen tip will wear with normal use. When the pen tip gets too short, you can replace it with one of the extra tips that came with the pen.





To remove the old tip:

Clasp it with a pair of tweezers, needle-nosed pliers, or similar instrument and pull the old tip straight out of the pen.

To insert a new tip:

Slide it straight into the barrel of the pen. Firmly push the tip until it stops. The new tip will slide into the correct position.

If the pen tip wears and becomes angular, it may damage the coating on the Pen tablet display screen. To avoid this, periodic tip replacement is recommended.

WARNING Prevent children from swallowing the pen tip or side switch. The pen tip or side switch may accidentally be pulled out if children are biting on them.

Removing and installing the Duo Switch

Some users prefer to remove the DuoSwitch when working with the Grip Pen. For example, you may want to remove the switch in order to focus on a drawing and eliminate any accidental clicks that would occur if you unintentionally pressed on the switch. Note, however, that removing the DuoSwitch also removes the button functionality it offers. For most users it is unnecessary to remove the DuoSwitch.

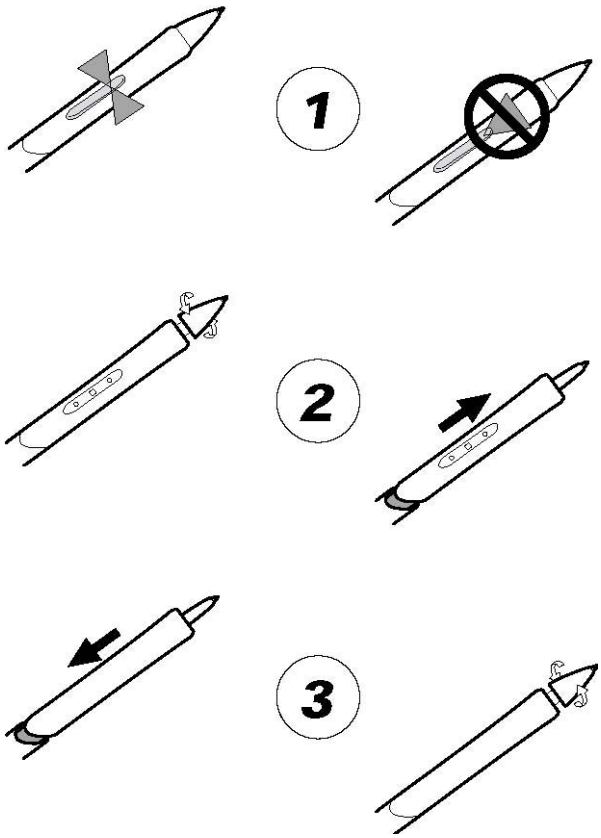
Important: Do not remove the switch by prying it from either end as this may damage your Pen. NEVER adjust the trimmer capacitor that will be visible when the switch is removed. When using the pen without the DuoSwitch, always replace the original rubberized grip with the optional grip in order to protect the trimmer capacitor.

To remove the DuoSwitch:

12. Firmly clasp the DuoSwitch in the middle and pull out. (Press in on the rubberized grip in order to better grasp the switch.)

13. Remove the pen tip cone by turning it counterclockwise. Then pull the grip forward over the pen tip.

14. Install the optional grip by aligning the pen case rails with the grooves inside the grip and pushing the grip over the pen tip. Then replace the pen tip cone by turning it clockwise onto the pen.

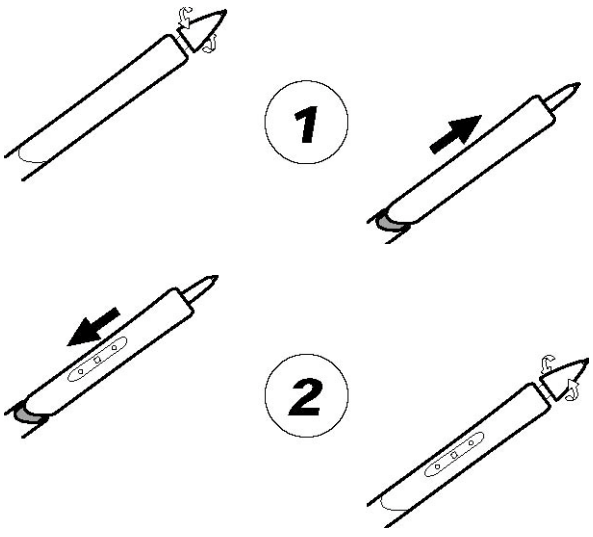


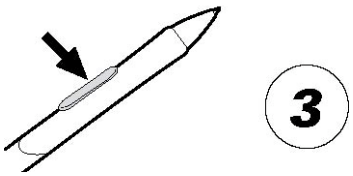
To Install the DuoSwitch:

15. Remove the pen tip cone by turning it counterclockwise. Then pull the grip forward over the pen tip.

16. Install the original grip (the one with the DuoSwitch access slot) by aligning the pen case rails with the grooves inside the grip and pushing the grip over the pen tip. When properly positioned, the DuoSwitch access hole will reveal the trimmer capacitor. Then install the pen tip cone by turning it clockwise onto the pen.

17. Align the DuoSwitch into place, making sure to match the switch position to the grip molding. Then gently press in on the DuoSwitch until it snaps into place.





Precautions on using and handling the Pen-Tablet

Temperature and Humidity

Operating temperature and humidity 5˚ to 35˚C, 20 to 80% RH

Storage temperature and humidity -10˚ to 60˚C, 20 to 90% RH

CAUTION. Do not use or store the pen tablet where:

- Temperature changes are severe or exceed specifications (e.g., outdoors or inside a vehicle).
- The pen tablet and the Grip Pen are exposed to direct sunlight or heat from an appliance.
- The pen tablet and the Grip Pen are exposed to water or any other kind of liquid.

CAUTION. Do not use The pen tablet in a dusty environment; this may damage the unit

Handling

WARNING: If the LCD screen has been damaged, DO NOT touch any liquid that may be leaking from it; this liquid is an irritant. In case of contact with skin, eyes, or mouth, rinse immediately with running water for at least 15 minutes or more. If contact is made with the eyes or mouth, also consult a physician.

WARNING: **Prevent children from swallowing the pen tip or side switch.** The pen tip or side switch may accidentally be pulled out if children are biting on them.

CAUTION: **Do not disassemble the Grip Pen.** This may cause the device to malfunction. In this case, Wacom shall have no responsibility to repair or replace the product.

CAUTION: Do not scratch the display screen. Avoid placing sharp objects on the display screen surface.

CAUTION: **Avoid intensive shock or vibration to the pen tablet or the Grip Pen.** Hitting or dropping the pen tablet display may damage the display screen or other components.

CAUTION: Do not put heavy articles on the Interactive Pen Display or push against it with a strong force; this may damage the display screen or bend the stand.

CAUTION: If the pen tip becomes sharp or angular, it may damage the coating on the display screen. Please replace the pen tip if necessary.

CAUTION: **Do not use any organic solvent (e.g., alcohol) or even mild detergent to clean the display screen**. Use of these cleaners can damage the coating on the screen. Please note that damage of this kind is not covered by the manufacturer's warranty.

To clean the display screen, use an anti-static cloth or a slightly damp cloth. When cleaning, apply only a fixture amount of pressure to the display screen and do not make the surface wet.

To clean the pen tablet casing or Grip Pen, use a soft cloth with mild detergent (such as dish washing liquid) diluted with water.

Appendix 4, Technical information

Power

Power Requirements:	100VAC to 240VAC +/- 10%, 50-60 Hz
Power Consumption:	400 Watts max
Power Factor:	>85%
Inrush Current:	90A @ 230VAC
Power Connector:	IEC 3-pin

Service & Maintenance

With care the Vista console will require little or no maintenance. However, the internal battery will need to be replaced on a regular basis (see the following section).

If the front panel requires cleaning, wipe with a mild detergent on a damp soft cloth.

The CD drive mechanism is mechanical and should always be treated with care. Never allow the entry of fluids into the slot.

DO NOT spray liquids onto the front panel.

DO NOT use solvents for cleaning the front panel.

Warning: Do not allow the entry of liquids of any sort into the console chassis.

The CPU tray should be periodically cleaned to ensure dust does not build up near the fans.

Battery replacement

The Vista console has an internal battery that is used to maintain system BIOS settings. The battery should last approximately 5 years from the date the battery was made. If the console reports BIOS check errors, please return the console to an authorised agent for battery replacement.

Installation

The Vista console must be installed in a location that allows adequate ventilation around the rear of the console. There must be at least 150mm of free space around the rear and sides of the console when in use. Failure to allow adequate ventilation may result in premature shutdown of the console.

An external UPS may be connected if mains blackouts are anticipated.

If a USB mouse or keyboard is required, run the wire through the hole in the base of the armrest.

Operation

Always use the correct procedure to shut the console down. Select "Shutdown" from the console menu.

General Specifications

Ingress protection	IP20
Maximum Ambient Temperature	40C
Size (mm)	1264(w) x 218 (H) x 640 (D)
Weight	Net: 47kg
	Shipping: 68kg
Cooling	Three speed controlled Fans
CPU	2.8GHz/533MHz Pentium 4
RAM	512Mbyte, expandable to 1024Mbyte
Hard Drive	40GB ATA100, shock mounted
Internal Tablet	Wacom PL550 graphics tablet 1024x768 pixels
External monitors	Two x 1024x768 pixel each
SMPTE input	0.1Vpp min, 1.2Vpp max, 1/30 – 10X normal
Desk Lamps	two x 5W max

Inputs & Outputs

Description	**Type**	**Pin Outs**	**Function**

Description	Type	Pin Outs	Function
DMX 512 (1-4)	5 pin Female AXR	1	Shield
		2	Data –
		3	Data +
		4	Data – (DMX 4 only)
		5	Data + (DMX 4 only)
Ethernet (100BaseT)	RJ-45	1	Transmit +
		2	Transmit –
		3	Receive +
		4	Unused
		5	Unused
		6	Receive –
		7	Unused
		8	Unused
SMPTE (Audio)	3 pin Female AXR	1	Shield
		2	LTC –
		3	LTC +
MIDI In	5 pin Female DIN	1	NC
		2	Shield
		3	NC
		4	RX+
		5	RXD
MIDI Thru/Out	5 pin Female DIN	1	NC
		2	Shield
		3	NC
		4	TX+
		5	TXD

Description	Type	Pin Outs	Function
COM (RS232)	9 pin D	1	DCD
		2	RXD
		3	TXD
		4	DTR
		5	Gnd
		6	DSR
		7	RTS
		8	CTS
		9	RI
Trigger In	6.5mm Jack Socket	Tip	Trigger In
		Sleeve	Ground
Trigger Out	6.5mm Jack Socket	Tip	Trigger Out
		Sleeve	Ground
Video 1 Video 2	15 pin High Density D	1	Red
		2	Green
		3	Blue
		4	NC
		5	Ground
		6	Red Ground
		7	Green Ground
		8	Blue Ground
		9	Vcc
		10	Sync Ground
		11	NC
		12	VD Data
		13	Horizontal sync
		14	Vertical sync
		15	VD Clock
USB	Type A	1	Vcc
		2	Data –
		3	Data +
		4	Ground

Description	Type	Pin Outs	Function
Audio Mic	3.5mm Jack socket	Tip Sleeve	Signal Shield
Audio Out	3.5mm Jack socket	Tip Ring Sleeve	Left Right Shield
Audio Line In	3.5mm Jack socket	Tip Ring Sleeve	Left Right Shield
Desk Lamp 1 Desk Lamp 2		1 2 3	Chassis Lamp – 12V

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